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REQUIRED READING FOR DECEMBER.

WHAT ENGLISH IS.

BY RICHARD GRANT WHITE.

In the course of our two foregoing articles we followed the advance of the great Aryan or Indo-European race, to which we belong, from its original seat in Central Asia, which it began to leave more than four thousand years ago, until we found it in possession of India, Persia, and all of Europe. We considered briefly and incidentally the fact that within the last two hundred and fifty years this Asiatic race has taken absolute possession of the greater part of the continent of North America. We saw that speech was the bond and the token of the now vast and vague, but once narrow and compact, unity of this powerful race, which was brought into existence to conquer, to rule, and to humanize the world. Of the numerous languages which have sprung from the Aryan stem, English is the youngest. Compared in age with any other language of that stock, we may almost say with any existing language of any stock, it is like a new born babe in the presence of hoary old. Only eight hundred years ago it was unknown. True, its rudiments and much of its substance then existed; but so it might be said that they existed in a certain degree four thousand years ago, as we saw in our last article. Yet again, more than four hundred years passed away before modern English was born. It was not until about the beginning of the sixteenth century that the language of Spenser, of Shakspere, of the Bible, of Bunyan, of Milton, of Goldsmith, Burke, Irving, Hawthorne, and Thackeray, came fully into existence as the recognized established speech of the English race.

Since that time the changes it has undergone have been trivial and unimportant. Like the languages of all other highly civilized peoples, it has received many additions, but its essential character has not changed; its structure has been modified so slightly that the change is perceptible only on the closest examination; its syntactical construction has remained unshaken. The prose of Spenser and Shakspere and the correspondence of the educated men of their day is as easily understood by an unlettered English speaking man of our day as the prose of Sir Arthur Helps or the more intelligible passages in the daily newspapers. During that time, indeed, there have been changes of style in writing English, which are more or less distinctive of periods. A reader of moderate experience and discrimination can soon tell whether a page that is put

before him was written in the Elizabethan period, in that of the Restoration (Charles II.), in that of Queen Anne, or that of Victoria. But the differences by which his judgment would be guided are differences of tone, of manner, of "the way of putting things," of certain tricks of expression, and are without any relations whatever to the "grammar," or to the essential character of language. The presence of words not in use at one period, but which came into use at another, is an important means of such a discrimination. But, in the first place, the introduction of new words does not modify the essential character of a language; and in the next we are not now considering a criticism which goes so far as to examine the history of the English vocabulary.

This modern English, which is the youngest, is also the greatest language ever spoken. A man may be supposed, not unreasonably, to be prejudiced in favor of his mother tongue; but the judgment that declares in favor of English against all other languages, even Greek, needs neither motive nor support from prejudice. The two facts, that the English language is the vehicle and the medium of a literature unequaled by that produced in any other known tongue, and that it is becoming the common intermediary and most widely diffused speech of the world, show that it possesses in the highest degree the two essential elements of a great and complete language—adaptation to man's highest and to his homeliest needs in expression. There is no other known language in which "King Lear," "Hamlet," "Antony and Cleopatra," the Falstaff scenes in "King Henry the Fourth," "The Pilgrim's Progress," "Paradise Lost," the Roger de Coverley papers of the "Spectator," "The Elegy in a Country Churchyard," "The Vicar of Wakefield" and "She Stoops to Conquer," "The School for Scandal," "Waverley," "The Antiquary" and "The Fortunes of Nigel," "Childe Harold" and "Don Juan," "The Pickwick Papers," "Henry Esmond," "Adam Bede" and "Romola," "In Memoriam" and "Sir Galahad," "The Earthly Paradise," "Child Roland" and "The Scarlet Letter" could *all* have been written. No other language is at once grand enough and simple enough, strong enough and flexible enough, lofty enough and homely enough to be the natural, fitting and complete utterance of the literature of which these are the typical productions, and to be,

moreover, at the same time perfectly adapted to the needs of the jurist, the politician, the man of business, and the mariner. I remember that once on the St. Lawrence, on the way to Quebec, as the steamer came to a landing, the French officer on the "bridge" screamed an order to the engineer, "*Arretez donc, Alphonse! arretez donc!*"¹ and that then I recollect that the day before on the British steamer in which I left Montreal, the English officer in just the same situation had quietly said, in his strong, firm voice, "Hold hard!" and that I then thought not only how much more effective those two syllables were as a phrase of nautical command, but that they might be used by an English poet in a passage of grand and strong emotion. English has no words which are too great or too little, too fine or too homely to be used when need requires. English words change their character and their expression according to their connection and the manner in which they are uttered.

English owes its supremacy first, to the vigorous vitality of its germ and the clear robustness of its stem; next, to the rich and infinitely varied word-growth, which this trunk supports and nourishes. All languages are more or less composite, but of all languages English is most composite. It has been largely and richly grafted. It is, of all languages, the most complex in substance, and the simplest in structure. This simplicity of structure enables the uneducated man—Bunyan, for example—to use it with correctness and force, while the vast variety of its substance adapts it to all the needs of poet and philosopher. Let us see how such a language came into existence, and what it is.

The people which spoke the English language when it assumed its modern form, had made it. This may seem to be the sort of truth which is triteness; but it is not so. The people which speaks a language generally does make it; but not always, as we shall see. The people who made the English language, and who made England, were of that part of the great Aryan family which had taken possession of the north-western part of Europe—that which lies around the southern and western part of the Baltic Sea. It is commonly said that the English are a very composite and heterogeneous people. In a narrow sense this is true, but in a large and really significant sense it is quite untrue. In his welcome to the Danish princess Alexandra, when she arrived in England to become Princess of Wales, the poet laureate prettily availed himself of the minor truth, to sing

"Saxon and Dane and Norman are we,
But all of us Danes in our welcome of thee,
Alexandra!"

The English race is, and for more than five hundred years has been compounded of Saxons (Angles, Saxons and Jutes), Danes and Normans. But these three peoples were of such close kindred that, in Launcelot Gobbo's phrase, they were "cater cousins."² They were all Goths; the Danes and the Normans were both Scandinavians; and the Saxons, the Angles, and particularly the Jutes, although they were Low German tribes (the term Low German meaning merely inhabitants of the lower parts of Germany near the sea) were, because of their origin, and also of their neighborhood to the others, so like them in blood and in speech that the difference was rather superficial than essential.

These Jutes, Angles and Saxons, continuing the armed Aryan progress westward, went to Britain in companies of hundreds and thousands, and fighting their way from the shore inland at various points, and continually reinforced from their hive on the continent, in the course of about one hundred and fifty years they obtained complete possession of the island, from the Tweed to the Channel, excepting only the mountainous part at the west, now called Wales. They seem not to have mingled with the conquered Britains, who it will be remembered were Celts, but to have wholly displaced them, to have

swept the land clean of them, except in Wales, the Highlands of Scotland, and a small remnant in Cornwall, the extreme southwestern point of the island. They carried with them their Scandinavian-tinged Low German speech (called for convenience Anglo-Saxon), which became the language of the country whose name their presence and possession changed from Britain to Angle-land, Engel-land, England. But when they had established themselves they were not left undisturbed. The Danes poured in upon them at the north, and soon getting foot-hold, they in their turn attempted the conquest of the whole island. They succeeded so nearly that they not only obtained possession of the northern part of the England of that day, but of the government; and three Danish kings* ruled the land at London. They did not, however, like the Anglo-Saxons, destroy their predecessors; partly from lack of strength to accomplish such a destruction, and partly, it would seem, from affinities of race and habits of life. Danes and Anglo-Saxons mingled; although the former were chiefly confined to the northern part of the country. One result of this conquest and intermingling was a modification of the speech of the country, particularly at the north. It received a strong Scandinavian infusion, the alterative influence of which has been recognized more and more by philologists as they have studied the structure and history of the English language. It should be said here, and perhaps should have been said before, that the name Dane had in these early times a large and loose signification. It was applied, without much discrimination, to any people that lived in the Scandinavian country—Norway and Sweden as well as Denmark.

Alfred, that first great Englishman, who, if not the only good English king, has been approached neither in ability nor worth by any of his successors to this day, is generally thought of as having conquered the Danes and extinguished their power in England; but erroneously. The Danes were worsted by him; but the Danish settlers in England were not ousted, nor could they be, for they had become a part of the people; the Danish influence upon English life was not much diminished. It was within the quarter of a century following Alfred's death that the Danish king Sweyne levied an annual tribute of £36,000 upon England, and that Danes were called Lord Danes. Forty-two years after Alfred, the Danish Canute, son of Sweyne, was crowned king of England; and the Danish pretensions to the rule of England were not wholly abandoned until the occurrence of an event which had little less influence upon the language of England than upon its fortunes. Edward the Confessor, the last of the royal line of ancient England, was little more than king in name and state. The country was really ruled by a council of six great earls, Danes and English, who partitioned the control of the country among themselves. The Anglo-Saxons had invaded Britain, and had conquered the Celtic Britons and removed them from the soil; the Scandinavian Danes had invaded England, and partly conquered the Anglo-Saxons (now called Englishmen), but had not destroyed their near kinsmen, and the two people had mingled. And now, in the eleventh century (1066), the Normans invaded England and conquered its Dano-Anglo-Saxon people in their turn. Harold, who claimed and obtained the throne, on the death of Edward the Confessor, as his heir, but not as his descendant or lineal successor, was himself half Dane, his father having been Earl of Kent, his mother Gytha, a Danish noblewoman. The influence of the Scandinavian element on the character and the language of modern England was very great, and until of late has been underrated.

The conquest of England by the Normans, and the division of it into sixty thousand knight's fees, distributed mostly among the followers of the Norman duke, who were thus with their families and followers scattered widely over the country,

*Quarter cousins. *The Merchant of Venice*; Act ii, Sc. 2.

¹ Omitting Sweyne, who was proclaimed king, but whose possession of the throne was brief, and whose regal authority was not fully established or recognized.

was the cause of one of the most remarkable phenomena in the history of language—the introduction of Norman-French as an element of English speech. Some French or Romance words had come into England before, because of neighborhood and of affectation of foreign refinement, and a few Latin words had crept in under favor of the clergy; but now Norman-French was distributed all through the island as the speech not only of the holders of the sixty thousand knight's fees, but of all their followers, and a considerable number of their tenants, to say nothing of their adulatory imitators, or of the Norman clergy who accompanied them to bless and to share their conquest.

Now who were the Normans, and what was this Norman-French which they introduced into England? The Normans were simply North-men from the great Scandinavian peninsula now divided into Norway and Sweden. They were pirates and robbers. Bold and bloody on sea and land, they had been for two or three centuries the scourge and the terror of Southern Europe. The people on the continent called them simply "North-men," the people of England "East-men," (the name being determined, it will be seen, by the relative position of those who gave it), and sometimes, as has been said before, "Danes." These sea rovers and raiders effected settlements in various parts of Europe, but their most important lodgement, the only one with which we have now any concern, was in France, which they invaded on the south of the Seine, between that river and the Loire. Here in the course of less than a hundred years they had established themselves so firmly that in the year 912, Charles, the Frankish king, recognized and enfeoffed² the Viking Rollo, as first Duke of Normandy; Rollo acknowledging Charles as his over-lord, and receiving baptism—for the Normans were now, as the Anglo-Saxons had been until about A. D. 600, pagans. These Gothic Norsemen did not make the language that they soon came to speak. Conquerors and rulers although they were, they adopted the language of the country and the people which they had conquered, and spoke it with slight Gothic modification. This was the Norman-French which, only one hundred and fifty years after they were well settled in the country which they had seized, and which was called from them "Terra North-manorum,"³ or Normandy, they took into England.

This French language (Norman or other) was like many other things wrongly named. It was not the speech of the Franks or French, a German tribe, who in the fifth century conquered the country, and from whom it came to have its name. What, then, was it? We must turn back a moment.

It will be remembered that the column of Aryan immigration after entering Europe at its southeastern corner, divided; one division, the Celto-Græco-Italic, following the northern shore of the Mediterranean, taking possession of the country there, then pushing up northward to the country once called Gaul, now France, and finally crossing the English Channel and taking possession of Britain and Ireland. This column of immigrants founded, among other states, one which is hitherto the grandest, most influential fact in the history of the world—Rome, the city, the republic, and finally the empire of Rome; the influence of which upon the world has now, after more than two thousand years, not passed away; for the Roman Catholic Church, ecclesiastically supreme because it was the Church of Rome, is still one of the great powers of the earth. The Celtic peoples in Gaul were conquered by the great Caesar half a century before the Christian era. The Romans were wise conquerors; they made the people whom they conquered Romans. The Celts of Gaul, during centuries of Roman rule, lost almost all their native habits and customs, among them their mother tongue. They had Roman customs and laws, and they gradually adopted the Roman language—the Latin. As might be expected, however, they did not speak pure Latin. The very people of Rome did not speak pure Latin, if by that we

mean the Latin of Cicero's orations, and the poems of Horace and of Virgil. That was a literary language. The popular Latin was a speech much less formal and artificial. But the Celts of Gaul (or France) spoke this popular Latin much debased, and somewhat intermixed with Celticisms. The degradation of this form of Latin went on until the country was successfully invaded by German tribes in the fifth century. These Franks and Burgundians, being fewer than the Celto-Roman people whom they conquered, and inferior in civilization, gradually adopted their language, which, however, they broke up and simplified, by ridding it of case endings and tense signs; doing this for mere convenience sake; they had not the time or the patience to learn all the Latinish inflections. When about four hundred years of Frankish rule and influence and intermarriage had elapsed, it was discovered that the language of the people had become so greatly unlike Latin that it was practically another tongue. Wherefore it was decreed in the year 813 by the Council of Tours that the bishops should address their clergy and people in the Romance tongue, which was the name given to this popular modification of the old Roman (Latin) speech. This the Frank kings and courtiers, who had continued to speak German, were soon obliged to adopt; and after the division of Charlemagne's empire, in the year 843, German was restricted to the country beyond and just about the Rhine. The Romance tongue, spoken to the westward, was rapidly modified by degradation of forms, and by intermixture of Teutonic words, until it became about the eleventh century, what is known as Old French. It was a debased form of this Old French which the Scandinavian North-men, or Normans, adopted, and finally carried into England, not only as the court language, but to spread it all over the country. This, then, is the strange phenomenon in language which is consequent upon the Norman conquest of England; that a Gothic people conquering and uniting themselves with another Gothic people, took into the conquered country, not a Gothic, but a Romance tongue. When the Norman conquerors spread themselves over all England, accompanied by their followers of various ranks (for it is an absurdly erroneous notion that all the Normans that went to England were nobles, or even knights), they took there no race of foreign blood. To the Dano-Anglo-Saxon English stock, they merely added more of the Danish element. But most strangely, the language brought in by this victorious body of near kinsmen was the most foreign that could have been found west of the Caucasus.

At first, with the pride of conquerors, the Normans in England spoke their own, or rather their adopted tongue. Norman-French was the language of the court, of the law-courts, of "society." English was "vulgar." This went on for some generations. The condition of things in this respect could not, however, remain unchanged. Two tongues can not be spoken by people in constant intercourse with each other without both being more or less affected by the contact. This happened. The English (called Anglo-Saxon or Old English) and the Norman-French were each modified by the other; they interchanged words and idioms; each dovetailing itself into the other, until about the year 1350, when it was discovered that the distinction of Norman and Englishman had practically passed away, and that the conqueror, yielding to the steady, gradual influence of the people and the country he had conquered, had himself become an Englishman. English had become the speech of the whole people, and thereafter English was by decree the language of all public documents, proclamations, and the like, the language of the court, and of "society."

Of the English, however, which thus came into vogue, it must be remembered, first, that it did not prevail in the same form among all the people, but only among the superior classes and the middle classes of the best condition; that even among them it was spoken and written with much variation; and that

as to the rustic people, they spoke almost as many dialects of the Old English as there were shires in England. Second, that this English of 1350 was so unlike both the Old English of Alfred's day, four hundred years before, that he would not have been able to read it without much study, and that it was equally unlike the English of Queen Anne, four hundred years later.

The introduction of the Norman-French element into the English language was a gain, the value of which, in the enrichment of our tongue, and in its increased adaptability to the wants of a highly civilized people can not be overestimated. The Old English (or Anglo-Saxon) was a strong, manly speech, and not without a certain homely charm and simple sweetness. It was direct, too, and seemed (but perhaps merely seemed) to be the speech of an honest people. It was however, rude, inflexible, limited in its vocabulary, and incapable of expressing fine distinctions of thought. In all these respects it was so profited, so endowed, so broadened, so supplied and so refined by its union with the Romance vocabulary which was largely grafted upon it, that it blossomed almost into another language; quite another if its capacities are considered. An examination of the more particular nature of these changes, which have direct connection with the practical use of the language, must be postponed until our next article.

To this two-elemented language, a language composed of two stocks so different as the Gothic and the Latin, and yet strangely spoken by a people wholly Gothic and largely Scandinavian in blood, there came now, or began to come, an addition which was destined to affect its character greatly, and without which it would not be the matchless language that it is. This addition was not an addition of substance, but of spirit, not of matter but of manner. It came to the English language because of the bold and independent spirit of the English race in politics and in religion. It came through the translation of the Bible into the English tongue. This brought into the English language, alone among all the languages of the Indo-European race, not a foreign element indeed, but the informing spirit of a great literature written in a tongue so radically unlike all Aryan speech that the existence of the two would seem wholly incompatible with the theory of evolution, and to imply two independent creations of man; at least two independent creations of language. Yet these two languages or families of languages, the Aryan and the Semitic, seem to have come into existence in neighboring countries. As our Aryan forefathers, in their earlier movements, and before their first division, passed between the Caspian Sea and the Persian Gulf, they skirted the northern borders of the great peninsula of Arabia, into which none of them, not even those who turned southward, seem to have attempted to penetrate. This peninsula was at that time, we may be sure, although there is neither evidence of the fact nor testimony to it, occupied by the Semitic race; a race of great power and peculiar genius, which has had an influence upon the world hardly less than that of the Aryan peoples. Why the Aryans did not attempt the conquest and possession of Arabia, we do not know. But it is to be remembered that they were then comparatively small in numbers; and the Semitic race is one at once so warlike and so sagacious, that the conquest would have been one of the utmost difficulty, even if it were practicable; and moreover, that the country is not an inviting one to strangers.

The great function of the Semitic race in the world seems to have been the conception and the promulgation of the idea of the One Spiritual God. This idea, to which the race still holds, spread itself with an all-controlling influence over the civilized globe. It is the corner stone of the Christian and the Mohammedan religions. The Semitic race, of which the Hebrews are a family, has, or had, among its other gifts, the gift of sublime, intense, and imaginative utterance in prose and in poetry. In this respect it is without rival among all the peoples who have or who have had a liter-

ature. To these qualities it adds that of a direct simplicity, which in pathos (if with art, with an art so hidden as to leave not even the suggestion of consciousness), attains the power both of the ideal and the real, and never descends so low as sentiment. Of fancy, the Hebrew writers (for it is they whom we are now considering) exhibit none; less it would seem because of the nature of their themes, than because fancifulness was foreign to their intensity and loftiness of soul. The writings forming the most important part of the early Hebrew sacred literature form also, as we all know, that Old Testament which fills the largest part of the Bible—that is, the Book which has been for more than fifteen hundred years held sacred by all christendom.

This sacred Book—which, even if it did not contain the revelation of the idea of the One Eternal and Almighty God, and of his dealings with them who deemed themselves his chosen people, and the teachings of Jesus of Nazareth and of the great apostle to the Gentiles, would yet be the most remarkable collection of writings known in literature—it has been the policy of the church of Rome to keep from the people. Its translation into the vulgar tongue, and its distribution among the people at large, have always by that church been most earnestly discouraged, and even, until a comparatively late date, forbidden. It is remarkable that its earliest translations were into languages of Gothic peoples. Bishop Ulphilas's translation of the Gospels and a small part of the Old Testament into the Mæso-Gothic language, in the fourth century, has already been mentioned. About three centuries later an Anglo-Saxon translation of the Gospels was made; and there is evidence, as we are assured by Bosworth,* in the rubrics[†] that portions of them were constantly read in Anglo-Saxon churches. But these versions did little to bring the Bible before the eyes of the people at large; and besides, they were, as we have seen, confined to a very small part of that book. The Old Testament remained to all intents and purposes in an unknown tongue until the dawn of the Reformation in England. Wycliffe and his followers translated the whole of the Bible about 1380; and from that time, notwithstanding bulls, and anathemas, and persecutions, this book of books, *The Book*, became the possession of the whole English people.

We are concerned here only with the effect of this momentous work upon the English language. It was great and peculiar. Wycliffe's English version was followed in 1535 by Coverdale's, which was afterward republished with revision, by Taverner's, and by others, including the famous Geneva Bible, of which fifty editions were published in England within thirty years. These versions were mostly revisions, each "translator" availng himself, of course, of the text of his predecessors. Finally, in 1611, there was made what is known as the "authorized," or King James I. version, which has since that time been, next to their common blood and common speech, the strongest bond of unity for the English race. But between the making of Wycliffe's translation in 1380 and the middle of the sixteenth century, the Bible had taken strong hold of the English people. It sank into their hearts; it lifted their souls; its modes of thought became their modes of thought; its phrases, their household words. When Puritanism appeared, and strangely relied upon the Old Testament as its armory of theological warfare, the thoughts and the words of the prophets, priests and kings of Israel were the daily intellectual food of no inconsiderable part of the common people, and the air of all England was vocal with the phraseology of Job, of David, of Isaiah, and of Ezekiel. The effect of this upon the English mode of thought and expression was great and lasting; enduring even to this day. Its value was inestimable. By reason of it English diction acquired a simplicity, strength, a directness, a largeness of style, a capacity of gran-

* See the preface to his edition of the Gothic and Anglo-Saxon Gospels with the versions of Wycliffe and Tyndall. London: 1865.

deur and of pathos, a richness and variety which it otherwise would not have acquired, and which has not been attained by the language of any other people. The spirit of Hebrew literature was transfused into the English mind to such a degree as to modify its mode of thought and of utterance. This took place because the diffusion of the Bible happened just at the time when the language was in a state of transition, and modern English was in course of formation. Had it not occurred until afterward, as was the case with other European peoples, it would have been too late to produce this effect. The English of Shakspere, of Milton, of Bunyan, and their great suc-

cessors would not have existed but for the translation and diffusion of the Bible among the English people.

This, then, English is: a sturdy Gothic stem, largely and deeply grafted with Romanic scions, and permeated with the spirit of Hebrew sublimity and passion. These are the sources elements of the supremacy of the youngest language of the Aryan stock. It unites all the powers and possibilities of its congeners, and adds to them those of the speech of the only other race that has felt and uttered the highest aspirations of humanity, and largely swayed the course of man's progress through his unknown future.

SUNDAY READINGS.

SELECTED BY CHANCELLOR J. H. VINCENT, D.D.

[December 7.]

But by what means can a mortal man, the creature of a day form any idea of eternity? What can we find within the compass of nature to illustrate it by? With what comparison shall we compare it? * * * What are any temporal things, placed in comparison with those that are eternal? What is the duration of the long-lived oak, of the ancient castle, of Trajan's pillar,¹ of Pompey's amphitheater?² What is the antiquity of the Tuscan urns,³ though probably older than the foundations of Rome; yea, of the pyramids of Egypt, suppose they have remained upward of three thousand years; when laid in the balance with eternity? It vanishes into nothing. Nay, what is the duration of "the everlasting hills," figuratively so called, which have remained ever since the general deluge, if not from the foundation of the world, in comparison of eternity? No more than an insignificant cipher. Go farther yet; consider the duration, from the creation of the first-born son of God, of Michael, the archangel, in particular, to the hour when he shall be commissioned to sound his trumpet, and to utter his mighty voice through the vault of heaven, "Arise ye dead and come to judgment!" Is it not a moment, a point, a nothing, in comparison of unfathomable eternity? * * * In order to illustrate this, a late author has repeated that striking thought of St. Cyprian:⁴ Suppose there were a ball of sand, as large as the globe of earth; suppose a grain of this sand were to be annihilated, reduced to nothing, in a thousand years; yet that whole space of duration, wherein this ball would be annihilating at the rate of one grain in a thousand years, would bear infinitely less proportion to eternity, duration without end, than a single grain would bear to all the mass!

To infix this important point the more deeply in your mind, consider another comparison: Suppose the ocean to be so enlarged as to include all the space between the earth and the starry heavens. Suppose a drop of water to be annihilated once in a thousand years; yet that whole space of duration, wherein this ocean would be annihilating at the rate of one drop in a thousand years, would be infinitely less in proportion to eternity than one drop of water to that whole ocean. See the spirits of the righteous that are already praising God in a happy eternity! We are ready to say, "How short will it appear to those who drink of the rivers of pleasure at God's right hand!" We are ready to cry out:

"A day without night
They dwell in his sight,
And eternity seems as a day!"

But this is only speaking after the manner of men; for the measures of long and short are only applicable to time, which admits of bounds, and not to unbounded duration. This rolls on (according to our low conceptions) with unutterable, incon-

ceivable swiftness; if one would not rather say, it does not roll or move at all, but is one still, immovable ocean. For the inhabitants of heaven "rest not day and night," but continually cry, "Holy, holy, holy, is the Lord, the God, the Almighty, who was, and who is, and who is to come!" And when millions of ages are elapsed, their eternity is but just begun. * * * What then is he, how foolish, how mad, in how unutterable a degree of distraction, who, seeming to have the understanding of a man, deliberately prefers temporal things to eternal? Who (allowing that absurd, impossible supposition that wickedness is happiness—a supposition utterly contrary to all reason, as well as to matter of fact) prefers the happiness of a day, say a thousand years, to the happiness of eternity, in comparison of which, a thousand ages are infinitely less than a year, a day, a moment?—*Wesley's Sermons*.

[December 14.]

There are some thoughts which, however old, are always new, either because they are so broad that we never learn them thoroughly, or because they are so intensely practical that their interest is always fresh. * * * Now, among such thoughts we may reckon that which all children know—that God loves every one of us with a special love. It is one of the commonest thoughts in religion, and yet so amazing that when we come to look steadily at it we come nigh to not believing it. God does not look at us merely in the mass and multitude. As we stand, so have we always stood, single and alone before the eye of his boundless love. This is what each man has to believe of himself. From all eternity God determined to create me, not simply a fresh man, not simply the son of my parents, a new inhabitant of my native country, an additional soul to do the work of the nineteenth century. But he resolved to create me such as I am, the me by which I am myself, the me by which other people know me, a different me from any that have ever been created hitherto, and from any that will be created hereafter. Unnumbered possible creatures which God saw when he chose me, he left to remain in their nothingness. They might have worshiped him a thousand times better than I shall ever worship him. They might have been higher, holier, and more interesting. But there was some nameless thing about me which he preferred. His love fastened on something special in me. It was just me, with my individual peculiarities, the size, shape, fashion, and way of my particular, single, unmated soul, which in the calmness of his eternal predilection drew him to create me. * * *

Must I not infer, then, also, that in the sight of God I stand in some peculiar relation to the whole of his great world? I clearly belong to a plan, and have a place to fill, and a work to do, all which are special; and only my specialty, my particular me, can fill this place or do this work. This is obvious,

and yet it is overwhelming also. I almost sink under the weight of the thought. It seems to bring God so very near. * * * I come in sight of the most overshadowing responsibilities. Responsibility is the definition of life. It is the inseparable characteristic of my position as a creature. I am constantly moving, constantly acting. I move impulsively and I work negligently. What, then, becomes of my special place and of my special work? From this point of view life looks very serious. Surely we must trust God with a huge confidence, or we shall be frightened into going and burying our talent in the earth!

Now, what is it about us which was the prime object of God's love when he chose us for creation? It can not be put into words. It is just all that which makes us ourselves, and distinguishes us from all other selves, whether created or possible. It was precisely our particularity which God so tenderly and intensely loved. The sweetness of this thought is almost unbearable. I draw in my breath as if to convince myself that I am alive, I lay my hand on my heart to feel its beating. First I smile, and then I weep. I hardly know what to do with myself, I am so delightfully entangled in the meshes of divine love. This specialty of God's love startles me more and more, the longer I familiarize myself with it. I am obliged to make acts of faith in God, acts of faith in all his different perfections, but the greatest act of faith in this specialty of his love of me, of such as I am, such as I know myself to be, even such as he knows me to be. Deeper and perpetually deeper, taller and perpetually taller, the shadow of my responsibilities is cast upon me. But it is not a dark shadow, not depressing, but inspiring; sobering, but not paralyzing. I see plainly that my love of God must be as special as God's love of me. I must love him out of my special place, love him through my special work; and what is that place, and what is that work? Is not this precisely the question of questions?—*Faber.*

[December 21.]

Though violent persecution is not an event, under the present circumstances of the Christian profession in this country, within the range of probability, yet serious and faithful opposition may be expected. Vigorous attempts will be made to deprive you of your crown, at one time by an assault on your doctrinal, at another by efforts to corrupt your practical, principles. A strong current will set in from the world to obstruct your progress, swelled by the confluence of false opinions, corrupt customs, ensnaring examples, and all the elements of vice, error and impiety, which are leagued in a perpetual confederacy against God and his Christ. Your faith will often be beset, not merely by the avowed patrons of error, but by such as "hold the truth in unrighteousness;" who, never having experienced the renovating power of divine truth, will be among the first and foremost to ridicule and oppose its genuine influence. While you live like the world, you may with impunity think with the church, but let the doctrines you profess descend from the head to the heart, and produce there the contrition, the humility, the purity, the separation from the world which distinguish the new creature, that world will be armed against you. "They think it strange that ye run not to the same excess of riot, speaking evil of you." In order to stand your ground, it will be requisite for you to "quit yourselves like men, and be strong." Aware that he is everywhere and at all times surrounded with danger, the life of a Christian is a life of habitual watchfulness; in solitude, in company; at home, abroad; in repose and in action; in a state of suffering, or a state of enjoyment; in the shade of privacy, or in the glare of publicity. Aware of his incessant liability to be ensnared, he feels it incumbent on him to watch. The melancholy history of the falls of Noah, of David, and of Peter, is adapted and designed to teach us this lesson.

An opportunity may present itself, perhaps, in your future course, of growing suddenly rich, of making at least a consid-

erable accession to your property; but it involves the sacrifice of principle, the adoption of some crooked and sinister policy, some palpable violation of the golden rule; or, to put it in the most favorable light, such an immersion of your mind in the cares and business of the world as will leave no leisure for retirement, no opportunity for "exercising yourself unto godliness," no space for calm meditation and the serious perusal of the Scriptures. Are you prepared in such a conjuncture to reject the temptation; or are you resolved at all events to make haste to get rich, though it may plunge you into the utmost spiritual danger? "Count the cost;" for with such a determination you can not be Christ's disciple.

By the supposition with which we set out, you have solemnly renounced the indulgence of sinful pleasures. But recollect that sin will return to the charge, she will renew her solicitations a thousand and a thousand times; she will sparkle in your eyes, she will address her honeyed accents to your ears, she will assume every variety of form, and will deck herself with a nameless variety of meretricious embellishments and charms, if haply in some one unguarded moment she may entangle you in those "fleshly lusts which war against the soul." "Count the cost." Are you prepared to shut your eyes, to close your ears, and to persist in a firm, everlasting denial? —*Robert Hall.*

[December 28.]

God delights in our temptations, and yet hates them; he delights in them when they drive us to prayer; he hates them when they drive us to despair. The Psalm says: "An humble and contrite heart is an acceptable sacrifice to God," etc. Therefore, when it goes well with you, sing and praise God with a hymn; goes it evil, that is, does temptation come, then pray; "For the soul has pleasure in him;" and that which follows is better: "and in them that hope in his goodness." * * * He that feels himself weak in faith, let him always have a desire to be strong therein, for that is a nourishment which God relishes in us.

The weak in faith also belong to the kingdom of Christ; otherwise the Lord would not have said to Peter, "Strengthen thy brethren," Luke xxii; and Romans xiv: "Receive the weak in faith;" also I. Th., v: "Comfort the feeble minded, support the weak." If the weak in faith did not belong to Christ, where, then, would the apostles have been whom the Lord oftentimes * * * reproved because of their unbelief?

Upright and faithful Christians ever think they are not faithful, nor believe as they ought; and therefore they constantly strive, wrestle, and are diligent to keep and to increase faith, as good workmen always see that something is wanting in their workmanship. But the botchers think that nothing is wanting in what they do, but that everything is well and complete.

Christ desires nothing more of us than that we speak of him. But thou wilt say, If I speak or preach of him, then the word freezes upon my lips. O! regard not that, but hear what Christ says: "Ask and it shall be given unto you," etc.; and "I am with him in trouble; I will deliver him and bring him to honor," etc.

When we are found true in our vocation and calling, then have we reaped honor sufficient, though not on this earth, yet in that to come; there we shall be crowned with the unchangeable crown of honor "which is laid up for us." Here on earth we must seek for no honor, for it is written, "Woe unto you when men shall bless you." We belong not to this life, but to another far better. The world loves that which is its own; we must content ourselves with that which it bestows upon us, scoffing, flouting, contempt. I am sometimes glad that my scholars and friends are pleased to give me such wages; I desire neither honor nor crown here on earth, but I will have compensation from God, the just Judge, in heaven.—*Luther's Table-Talk.*

GLIMPSES OF ANCIENT GREEK LIFE.*

III.—GREEK PRIVATE LIFE.

While the citizen prized above all things his liberty and his rights as a member of the state—a feeling which produced in many cases a citizen democracy—this principle was unknown within the household, in which he was a despot, ruling absolutely the inferior members, who had no legal grades except as distinguished into free and slaves. The laws were very cautious about interfering with his rights, and he was permitted to exercise much injustice and cruelty without being punished. If in such a case he was murdered by his dependants, the whole household of slaves was put to death, unless the culprit was detected. Nor could a household exist (except perhaps in Sparta) without the master. If he died, his widow became again the ward of her father or eldest brother, or son; and so strongly was this sometimes felt that men on their deathbeds betrothed their wives to friends who were likely to treat them and their orphan children with kindness. Of course clever women and servants often practically had their own way, and ruled their lord or master; but the theory of the Greek home was nevertheless always that of an absolute monarchy, if not a despotism.

There were two distinct styles of female dress prevalent. The first was the Dorian, which was noted for its simplicity. Unmarried girls at Sparta often wore but a single light garment, *chiton*,¹ fastened with clasps down the sides—a dress much criticized by their neighbors. Over this was the Doric *peplos*,¹ fastened on the shoulders with clasps, and leaving the arms bare. The Ionians wore a long linen *chiton* with sleeves, which reached down to the ground, and over it a large flowing wrapper, *himation*,² fastened with a girdle, worn high or low, according to fashion. As a general rule, unmarried women confined their hairdressing to mere artistic arrangement of the hair itself, while married women wore bands, fillets, nets, and coronets. Dyeing the hair was not uncommon, and the fashionable color was auburn, or reddish fair hair. Women's shoes were very carefully made, and they carried fans and parasols, as may be seen in the terra-cotta figures so common in our museums. Both sexes wore rings, but in addition the women wore earrings, armlets, and ankle-rings, generally of gold. These were the ornaments against which lawgivers made enactments, and which were forbidden or discouraged in days of trouble or poverty. The ornaments of one rich lady are spoken of as worth 50 minæ (about \$975), a very large sum in those days. The ordinary color of women's dress was white, but saffron cloaks, and even flowered patterns, are mentioned.

In Homeric days we find the old barbarous custom still surviving of buying a girl from her father for a wife, and this was commonly done, unless the father himself offered her as a compliment. The father, however, usually gave her an outfit from the price he received for her. In case of a separation this outfit came back to the father, but he was also obliged to restore the price he had received for his daughter. She does not appear to have had any legal rights whatever. In later days the custom of paying money was reversed, and the husband received with his wife a dowry, which was regarded as common property with his own, so long as she lived with him. In case of separation or divorce, this dowry had to be repaid to her father, and at Athens 18 per cent. was charged upon it in case of delay in repayment. In many states, to marry a second wife during the life of the first was against the practice, and probably the law, of the Greeks, but concubinage was tol-

erated and even recognized by them, though a married woman had at Athens a right to bring an action for general ill-treatment against her husband, in which she was obliged to appear and give evidence in person. The dowry seems to have been partly intended as a useful obstacle to divorce, which required its repayment, but we find that heiresses made themselves troublesome by their airs of importance, and this is referred to in Greek literature, in which men are frequently advised not to marry above them in wealth or connections. As all citizens were considered equal in birth, and as marriages with aliens were illegal and void, we do not hear of advice to young men not to marry beneath them. To marry a poor citizen girl was always considered a good deed, and is commended as such.

When a child was born in the house, it was usual in Attica, and probably elsewhere also, to hang a wreath of olive in case of a boy, a fillet of wool in case of a girl, over the door. This served as an announcement to friends and neighbors. Greek law permitted the parents absolutely to dispose of it as their property, and there was no provision against exposing it, which was often done in the case of girls, in order to avoid expense. These exposed children if found and brought up, became the slaves of the finder. But on the other hand, the laws showed special favor to the parents of large families. If a child was not exposed, there followed on the fifth day a solemn purification of all the people in the house, and on the seventh a sacrifice, when the relations assembled and the child was named generally after parents and grandparents, sometimes by reason of special wants or fancies—in fact, on the same principles which we follow in christening our children. There is no evidence until the later Macedonian times that birthday feasts were held yearly: and Epicurus' direction that his should be kept after his death was thought very peculiar. Children of rich people were often nursed by hired nurses—an employment to which respectable Athenian citizens were reduced in the hard times at the end of the Peloponnesian war. But a Lacedæmonian nurse was specially valued, and often bought at a great price among prisoners, as they were famed for bringing up the child without swaddling-clothes, and making him hardy and courageous. The Greeks used cradles for children as we do, and gave them honey as we do sugar, and the nurses represented on the vases are distinguished by a peculiar kerchief on the head, as they often are in our day by a cap or national costume.

As might be expected, the inventive genius of the Greeks showed itself in the constructing of all manner of toys, and children devised for themselves perhaps all the games now known and many more beside. Aristotle says you must provide them with toys, or they will break things in the house, and the older philosopher Archytas³ was celebrated for inventing the child's rattle. Plato also complains of the perpetual roaring of younger, and the mischievousness of older children. We may infer from these things that the Greek boys were fully as troublesome as our own. They had balls, hoops, swings, hobbyhorses, and dice, with dolls for the girls, and various animals of wood and earthenware, like the contents of our Noah's arks. They played hide and seek, blind man's buff, French and English, hunt the slipper, the Italian *morra*,⁴ and many other games which the scholastics and Germans have in vain endeavored to explain. But for grown people, we do not find many games, properly speaking, played for the game's sake, like our cricket. There was very simple ball playing, and, of course, gambling with dice.

As for the girls of the house, they were brought up to see and hear as little as possible. They only went out upon a few

*Selected from J. P. Mahaffy's "Old Greek Life."

state occasions, and knew how to work wool and weave, as well as to cook. We may fairly infer that the great majority of them could not read or write. The boys, on the contrary, were subjected to the most careful education, and on no point did the Greek lawgivers and philosophers spend more care than in the proper training, both physical and mental, of their citizens. The discipline was severe, and they were constantly watched and repressed, nor were they allowed to frequent the crowded market-place. Corporal punishment was commonly applied to them, and the quality most esteemed in boys was a blushing shyness and modesty, hardly equaled by the girls of our time. Nevertheless, Plato speaks of the younger boys as the most sharpwitted, insubordinate, and unmanageable of animals.

It does not seem that the office of schoolmaster was thought very honorable, except of course in Sparta, where he was a sort of minister of education. It was, as with us, a matter of private speculation, but controlled by police regulations that the school should open and close with sunrise and sunset and that no grown men should be allowed to go in and loiter there. The infant-school teachers, who merely taught children their letters, were of a low class in society, sometimes even teaching in the open air, like the old hedge schoolmasters in Ireland. The more advanced teaching of reading and writing was done by the grammar teacher, whose house was called, like that of philosophers and rhetoricians, a school,⁶ a place of leisure. For the physical and the aesthetic side we have still to mention the trainer and the teacher of music, the former of whom taught in the palestra⁶ the exercises and sports afterward carried on by the full-grown citizens in the gymnasium, which were a feature in all Greek towns. The teachers of riper youth stood in social position above the mere teachers of letters, but beneath the professors of rhetoric and philosophy (sophists). These latter performed the functions of college tutors at our universities, and completed the literary side of Greek education. The fees paid to the various teachers were in proportion to their social importance. Some of the sophists made great fortunes, and exacted very high fees; the mere schoolmasters are spoken of as receiving a miserable pittance.

The Greeks never thought of making foreign languages a matter of study, and contented themselves with learning to read and write their own. In so doing the schoolmasters used as text books the works of celebrated epic or elegiac poets, above all Homer, and then the proverbial philosophy of Hesiod, Solon, Phocylides,⁷ and others, so that the Greek boy read the great classics of his language at an early age. He was required to learn much of them by heart,⁸ especially when books were scarce; and his teacher pointed out the moral lessons either professedly or accidentally contained in these poets. Thus they stood in the place of our Bible and hymns in education. All this was grammar, which with music and gymnastics made up the general education of the Greeks. It excluded the elementary arithmetic of our "three R's," and included what they do not, a gentlemanly cultivation in music and field sports. It is very doubtful whether swimming was included, though Herodotus speaks of the Greeks generally as being able to swim. There is, however, evidence that from the fourth century B. C. onwards both elementary geometry and arithmetic, and also drawing, were ordinarily taught.

As regards music, every Greek boy (like modern young ladies) either had or was supposed to have a musical ear, and he was accordingly taught either the harp or the flute, and with it singing. Here again the lyric poems of the greatest poets were taught him, and the Greek music always laid the greatest stress on the words. Aristotle and others complain that amateurs were spending too much time on the practicing of difficult music, and we know from the musical treatises preserved to us that the Greeks thought and taught a great deal more about musical theory and the laws of sound than we do. The Greek tunes preserved are not pleasing, but we know that

they used the strictest and most subtle principles in tuning instruments, and understood harmony and discord as well as we do. Great Athenians, like Cimon, were often able to sing and accompany themselves on the harp, or lyre as we should rather call it. The Greeks laid great stress on the moral effects of music, especially as regards the performer, and were very severe in their censure of certain styles of music. They distinguished their scales as *modes*, and are said to have put far greater stress on keys than we do, calling some manly and warlike (Dorian), others weak and effeminate, or even immoral (Mixo-Lydian). The modern Chinese have the same beliefs about the moral effects of music. The Greeks had their keynote in the middle of the scale, and used chiefly the minor scale of our music. They had different names and signs for the notes of the various octaves which they used, and also different signs for vocal and for instrumental music.

Among the various exercises taught were those in fashion at the public contests in the games—throwing the discus, running, and wrestling, and those of use in war—throwing the dart, managing the sword and shield, and riding. Boxing was not highly esteemed, and seems not to have been properly understood by the Greeks, who would have had no chance against an English prize-fighter. The severest contest was the *pancratior*, where the combatants, who were naked and unarmed, were allowed to use any violence they liked to overcome their adversary. It was therefore a combination of boxing, wrestling and kicking, with occasional biting and gouging by way of additional resource. We hear of a wonderful jumping feat by Phayllus of Croton, who leaped forty-four feet; but as he probably jumped down-hill, and used artificial aids, we can not be sure that it was more than can be done now-a-days. The Spartans specially forbade boxing and the *pancratior*, because the vanquished was obliged to confess his defeat and feel ashamed; and they did not tolerate professional trainers. All the special exercises for developing muscle practiced in our gymnasium seem to have been known, and they were all practiced naked, as being sunburnt was highly valued. The Greeks smeared themselves first with oil and then with sand before their exercises, and cleaned themselves with a *scraper* or *strigil*, or in later days by taking a bath.

The servants of the house were of course slaves, with the exception of some field-laborers, and of nurses in times of depression and distress, when some free women went out for hire. To these cases we may add the cook, who was not an inmate of the house before the Macedonian time, but was hired for the day when wanted for a dinner party. All the rest were slaves, and were very numerous in every respectable household. The principal sorts of servants were as follows: There was a general steward; a butler who had charge of the store-room and cellar; a marketing slave; a porter; baking and cooking slaves for preparing the daily meals; an attendant upon the master in his walks, and this was an indispensable servant; a nurse, an escort for the children; and a lady's maid. In richer houses there was also a groom or mule-boy. This list shows a subdivision of labor more like the habits of our East-Indian families than those of ordinary households in England. If faithful, slaves were often made free, especially by the will of their master on his death-bed, but they did not become citizens. They remained in the position of resident aliens under the patronage of their former master or his representatives.

In proportion as the free population of Greece diminished the freeing of slaves became more and more common, until it actually appears to have been the leading feature in the life of the small towns. Thousands of inscriptions recording this setting free of individual slaves are still found, and on so many various stones, even tombstones, that it almost appears as if material for recording had failed them by reason of the quantity of these documents. The same increase of liberation was

a leading feature in the Roman empire, but there the freedman obtained the right and position of a citizen, which was not the case in Greece. The most enlightened moralists of both countries exhorted benevolence toward slaves, and the frequent freeing of them as the duty of humane masters, but none of these writers ever dreamt of the total abolishing of slavery, which they all held to be an institution ordained by nature. This seems also the view of the early Christian writers, who nowhere condemn the principle of slavery as such.

In the oldest times the dead were buried in their own ground, and close beside the house they had occupied. Afterward the burying of the dead within the walls of cities was forbidden except in the case of great public benefactors, who were worshiped as heroes and had a shrine set over them. The rest were buried in the fairest and most populous suburb, generally along both sides of the high road, as at Athens and at Syracuse, where their tombs and the inscriptions occupied the attention of everyone that passed by. The oldest and rudest monuments placed over the tomb were great mounds of earth, then these mounds came to be surrounded by a circle of great stones; afterward chambers were cut underground in the earth or rock, and family vaults established. Handsome monu-

ments in marble, richly painted and covered with sculpture, were set up over the spot. These monuments sometimes attained a size almost as great as a temple. The scenes sculptured on the marble were from the life and occupation of the deceased, more often parting scenes, where they were represented taking leave of their family and friends, nor do we possess any more beautiful and touching remains of Greek life than some of these tombs. In the chamber of the dead many little presents, terra-cotta figures, trinkets and vases were placed, nay, in early times favorite animals, and even slaves or captives were sacrificed in order to be with him; for the Greeks believed that though the parting with the dead was forever, he still continued to exist, and to interest himself in human affairs and in pursuits like those of living men. The crowded suburbs where the tombs were placed were generally ornamented with trees and flowers, and were a favorite resort of the citizens. The dead bodies of executed criminals were either given back to their relations or, in extreme cases, cast into a special place, generally some natural ravine or valley hidden from view and ordinary thoroughfare. Here the executioner dwelt, who was generally a public slave. This place was called *barathrum*⁹ at Athens, and *Ceadas*¹⁰ at Sparta.

GREEK MYTHOLOGY.

CHAPTER III.

The earliest and most natural form of idolatry was the worship of the heavenly bodies, and especially the sun, whose splendor, light, heat, and salutary influence upon all nature were regarded as the supernatural and independent powers of a deity. Hence the ancient myths ascribed personality, and intelligent activity, to the god of day, whom they worshiped under the name of Phoebus Apollo. They, however, attached to the history and worship of Apollo many things not connected with his original character as the source of light.

Delphi was a principal place of their religious solemnities, and from an early day the site of a temple dedicated to Apollo. The first was destroyed by fire; but in the time of the Pisistratidae a much more gorgeous one was built, and, through a long period of their national history, was a center of potent influences that did much to fashion the character of the people. Its wealth became immense, and was computed at ten thousand talents. In the neighborhood of Delphi the Pythian games were celebrated in the third year of every Olympiad, and in honor of Apollo's victory over the terrible Pythian serpent. On these occasions the celebrated Amphictyonic Council, whose sessions were usually held at Thermopylæ, met at Delphi, and the grave senators had the oversight of the games, prescribed rules for the contestants, and directed in the distribution of prizes.

The shrine of the god at Delos, his birthplace, was also greatly renowned. It was situated at the foot of Mount Cynthus, but the whole island was sacred. The same divinity had beside a great number of less celebrated temples and shrines, not only in Greece, but also in Asia Minor, and wherever Greek colonies were extended. The rites observed in these sacred places were, in general, more seemly than the ceremonial of their worship paid to some other of their gods, and may be counted among the educational forces that improved the social and political condition of the commonwealth. He granted them a prophetic dispensation, and the responses given by his oracles raised their hopes, or, if unfavorable, caused alarm. The supposed medium of the communications, a priestess, who ministered at the altar, was esteemed an important personage. The inspiration, when the conditions were favorable, often induced what seemed an ecstatic state of mind, bordering on madness, causing strange contortions of countenance, and in-

coherent utterances, understood by none except those who claimed to be inspired as interpreters, and even their rendering of the responses was often in enigmas, or terms of such double meaning as admitted an explanation in accordance with the events that followed. The convulsions of the priestess were, perhaps, real, but possibly brought on partly by the chewing of laurel leaves, and partly by gaseous vapors that issued from a cleft in the rock, beneath the sacred tripod.

The concept or image of this god Apollo, as expressed by both poets and artists, was their highest ideal of human excellence and beauty; a tall, majestic body, of exquisite symmetry, and having the vigor of immortal youth. Some of his statues, still extant, are described as marvels of excellence in their line, and those who can not have access to the originals will find copies more or less perfect, in almost any considerable collection having specimens of ancient art. One of the most celebrated of all ancient statues, on account of the completeness of the sculptor's work, is the "Apollo Belvidere." It was found at Antium in 1503, purchased, and placed in a part of the Vatican¹ called Belvidere. In proportions and altitude it is a noble figure; naked, or but slightly clad, and in every feature suggestive of the highest perfection of art. It seems to represent the great archer just after discharging his arrow at the Python, and shows his manly satisfaction and assurance of victory.

The legendary history of this god, whose worship was much celebrated by both Greeks and Romans, recites, among other things of interest, the memorable circumstances of his friendship for Hyacinthus, and his great love for Daphne. The legends will not lose all their interest, though it will be impossible to print them entire.

Hyacinthus was a beautiful youth of noble parentage, for whom the great Apollo manifested ardent friendship. He accompanied him in his sports, led the dogs when he went to hunt, followed him in his excursions on the mountains, and for him neglected his lyre and his arrows. As they one day played quoits together, Apollo heaving aloft the heavy discus,² with his great strength sent it high and far. Hyacinthus watched its flight through the air, and, excited with the sport ran to seize it, eager, in turn, to make his throw. Alas! in its rebound from the earth, it struck him a fatal blow. Apollo, pale and anxious, sustained the fainting youth, and sought, in vain, to heal the mortal wound. As some fair lily, whose

stalk has been broken, turns its limp flowers toward the earth, the head of the dying boy, too heavy for its shattered support, fell over on his shoulder; and the friendly god, lamenting deeply, said: "O hapless youth! thou diest, robbed of a life so pleasant, and I the cause. But thou shalt be immortal still. My lyre shall celebrate our love; and as a beautiful, fragrant flower, thou shalt dwell with me forever; the inscriptions on thy leaves* shall proclaim my sorrow." Even as he spoke the blood that stained the grass disappeared, and a hyacinth, of hues more beautiful than Tyrian purple, sprang from the spot, and shed its sweet fragrance there. "Beloved, though dead, thou shalt still live; and, with every returning spring the flowers that henceforth bear thy name shall revive the memory of thy virtues, and of thy sudden departure to the home of the immortals."

Apollo and Daphne.—The beautiful Daphne (dawn) was Apollo's first love. This was nature, if the myth is interpreted astronomically. The sun pursues the dawn that flees before his brighter effulgence. But in this love affair, Cupid, as he is wont, becomes an exciting cause, and with his arrow pierced the lover's heart. It was on this wise: Apollo once, exulting in his own recent victory over the monster Python, saw the rogue, Cupid, playing with his bow, and called to him saying: "What have you to do with such warlike weapons? Leave them for hands more worthy of them, and, child as you are, do not meddle with my arms."

The taunting words vexed the son of Venus, and, to avenge himself he resolved that even the conquering Apollo should feel the keen point of his little dart, and confess a wound that would be difficult to heal. So he quickly drew from his quiver two arrows of different make and metal, one to excite love, the other to repel it. With the latter, a blunt, leaden shaft, he struck the nymph Daphne, daughter of the river god Peneus. The other he thrust through the heart of Apollo, who, thus smitten, forgot his victories, and was at once seized with passionate love for the beautiful nymph, while she, delighting in woodland sports and the pleasures of the chase, had no desire to leave them. Her father wished to see her wedded, but now, more than ever, she hated the thought of marriage, and, blushing, earnestly besought her sire, saying: "Dearest father, grant me this favor, that I may always remain a maiden, like the fleet huntress Artemis."

He consented, but at the same time, in praise of her rare beauty, said: "Child, your own face will forbid it." Apollo dearly loved her and longed to claim her as his own, but his suit was in vain. She had no love to answer his, and turned from him. Stung by her indifference, yet enthralled by her charms, he followed, but her flight was swifter than the wind, and she delayed not a moment at his entreaties. "Stay," he cried, "daughter of Peneus, stay. Do not fly from me as a lamb from the wolf, or a dove from the hawk. I am not a foe. For love I pursue thee; and the fear that you may suffer injury in your rapid flight makes me miserable. You know me not. I am not a clown to be avoided and despised. Jupiter is my father, and gives me to know the present and future. They reverence me at Delphi and Tenedos as the god of prophecy, of song, and of the lyre. I carry weapons. At the twang of my bow the arrow flies true to its mark. But Cupid's darts have pierced me, and the distress of heart is insupportable. I know the virtue of all the healing plants, and minister to others, but myself suffer this malady that no medicine can cure. Pity, and—" * * * The nymph continued her flight, and left no plea half uttered. But even as she fled, her airy robe and unbound hair flung loose on the wind, she charmed him yet more. Impatient that his suit did not prevail, he quickened his speed, and the distance between them grew less. She eluded his grasp only as a panting hare escapes from the open jaws of the hound.

So flew Apollo and Daphne; he on wings of love, she on wings of fear. The very breath of the more powerful pursuer

reaches her delicate person; her strength fails, and, ready to sink, she cries to her father: "Help me, Peneus! Let the earth open to receive me, or change my form that has brought me into this trouble!" She spoke, and, at his will, the metamorphose was instant. A tender bark enclosed her form; her limbs became branches, her hair leaves; her feet were rooted in the ground, and her head became a symmetrical tree top, graceful to look upon, but retaining nothing of its former self save its beauty. Apollo stood amazed. He embraced with his arms the still palpitating, shrinking trunk, and lavished many kisses on the delicate branches that shrank from his lips. "You shall, assuredly, be my tree; and I will wear you for my crown. With you will I decorate my harp and my quiver. Conquerors shall weave from your branches wreaths to adorn their brows; and, as immortality is mine, you, too, shall be always green, and your leaf shall suffer no decay." The nymph, thence a beautiful laurel tree, bowed her head in acknowledgment, and the god was content.

This story of Apollo has been variously interpreted, and is often alluded to by the poets.

Waller applies it to the case of one whose love songs, though they did not soften the heart of his mistress, yet won for the poet widespread fame.

" Yet what he sang, in his immortal strain,
Though unsuccessful, was not sung in vain.
All but the nymph, that should redress his wrongs,
Attend his passion, and approve his songs.
Like Phœbus thus, acquiring unsought praise,
He caught at love, and filled his arms with bays."

Phæton's Ride.—The ocean nymph Clymene* bore to the god of day a son, they named Phæton (gleaming). Once when he boasted his celestial origin Ephaphos, a son of Jupiter, disputed his claim, alleging that he was puffed up with pride in a false father. The indignant Phæton reported the insult to his mother, who, with a solemn oath and imprecation, reassured him of his heavenly origin, and added: "The land whence the sun rises lies next to ours; go and inquire for yourself. See if he will not own you as his son." The youth heard with delight, and full of pride and hope hastened to the palace of his sire, who received him kindly, and from whom he obtained an unwary oath that, in proof of his fatherhood, he would grant him whatever he asked. The ambitious Phæton immediately demanded permission to prove his pedigree, and confound his adversary, by taking his father's seat, with leave, for one day, to guide the solar chariot in its course through the heavens. Phœbus, aware of the danger of any such attempt, would gladly have recalled his word, and persuaded the rash youth from his wild purpose. "This, my son, is far too perilous an undertaking, and quite unsuited to thy powers. These fiery horses would despise the guidance of Jupiter himself, were he to take the reins; how, then, can a mortal hand restrain them? Thou knowest not the perils of the way. In the freshness of the early morning the panting coursers scarce can climb that steep ascent; at noonday the downward glance to the far rolling sea, and the green earth lying at so vast a depth is hazardous even for a god. Canst thou, then, yet so young, resist the rapid movement of the whirling heavens, or endure the blinding brilliancy of those flaming orbs? That monstrous 'Lion,' the 'Scorpion,' and the 'Crab,' will surely terrify thee. The famed 'Archer' and the raging 'Bear' will threaten destruction. In the later hours the course descends rapidly, and requires most steady driving. Any charioteer, unused to the road, and the team, would be plunged headlong, or, deviating from the course, be swept away by the force that bears all else along, swift as the lightning. Forego that rash design. Look now on what the world contains, and ask some other boon. Ask it, and fear no refusal. Yet you shall have this, if you persist. The oath was sworn, and must be kept. Will you not be advised, and choose more wisely?"

But the self-confident youth, heedless of his father's counsel, and despising the warning, would, at any risk, gratify his foolish ambition. He demanded the immediate fulfillment of the promise, and prevailed.

And now the purple gates of the East were unfolded, and from within the palace there breathed celestial fragrance. The stars and waning moon gradually disappeared; and, at Phœbus' command, the swift Hours led forth from their stalls the prancing steeds and attached them to the golden chariot, their harness sparkling with gems, and the yoke gleaming all over with diamonds of exceeding brilliance. The daring youth gazed in admiration too eager for the coveted pleasure. Phœbus bathed his face with a powerful unguent that made him capable of enduring awhile the terrible heat, and placing a radiant circlet on his brow, that made him seem the very god of light, gave such instructions as were necessary. "Spare the whip, and hold tight the reins; my steeds need no urging; the labor is to guide and hold them in; you are not to take what seems the direct road, but turn off to the left; keep within the middle zone, that the skies and the earth may each receive their due share of light and heat; go not too high, lest you burn the dwellings of Ouranos; nor yet too low, or you will set the earth on fire; the middle course is safest and best; night is passing through the western gates, and the chariot can delay no longer; go, if you must, but, if you will, tarry in safety where you are, and allow me, as I have been wont, to light and heat the world." The too eager youth, hearing but little, sprang to the lofty seat, grasped the reins with boundless delight, standing erect, and pouring out thanks for his opportunity.

The snorting horses, impatient to be gone, and with the boundless plain of heaven stretching out before them, dart forward cleaving the clouds, and quite outrun the swiftest winds that started from the same goal. The load was much lighter than usual, and, as a ship, without freight or ballast, "is tossed hither and thither on the sea, so that vast chariot, without its accustomed weight, was dashed about in space, as if utterly empty." Phœton was incompetent to guide the fiery steeds, now quite out of the prescribed course, and was overcome with terror. Whither he was borne, at such furious speed, he knew not, but he was evidently in the midst of the most appalling dangers, against which he had been warned in vain. Paleness and sudden trembling came over him, and bitterly, but too late, repenting his folly, he wished he had never seen the gorgeous palace of Phœbus, known the truth of his parentage, or touched his father's horses.

On every side were strange, frightful objects menacing his destruction, and he was driven fiercely about among them, as a ship before a tempest when the pilot can do nothing. The reins drop from his nerveless hands, and the furious horses dash the quivering, rocking chariot through untraveled regions of space. The heavens were all in flames, the clouds were smoke, and far beneath them lay a burning world. The mountain tops, forests, harvest fields, and cities were becoming involved in the common ruin. The earth, stretching out suppliant hands toward heaven, implored the help of Jupiter lest the universe should be destroyed, and chaos again prevail. "Save what yet remains before all is lost. O, take thought for our deliverance in this fearful crisis."

The appeal was answered, and the king of gods summoned his forked lightnings, and hurled his thunderbolt that smote the affrighted charioteer, who now, himself on fire, fell like some shooting star that marks its course to earth with its winding sheet of flame. Eridanus,⁵ the great river, received the charred body and quenched the flame that would have consumed it. The pitying Naiads gave him a tomb, and some one provided the epitaph:

"Driver of Phœbus' chariot, Phœton,
Struck by Jove's thunder, rests beneath this stone;
He could not rule his father's car of fire;
Yet was it much, so nobly to aspire."

His sisters, the Heliades,⁶ so long and sadly mourned their brother that the gods changed them into poplar trees, whose tender branches shed tears of precious amber, which, hardening in the water where they fell, became jewels that were greatly prized, and worn as ornaments.

The world has known many whose foolish pride and ambition destroyed them. A recent writer quotes the last verse from one of Prior's familiar poems, on a female Phœton, and thus introduces it: "Kitty has been imploring her mother to allow her to go out into the world, as her friends have done, if only for once."

"Fondness prevailed, mamma gave way;
Kitty, at heart's desire,
Obtained the chariot for a day,
And set the world on fire."

POSEIDON (NEPTUNE) AND AMPHITRITE.⁷—This son of Cronos and Rhea became, by allotment, ruler of the sea, and received a three-pronged trident as the emblem of his power. Amphitrite, one of the daughters of Nereus, was his queen; and their gorgeous palace was in the deep waters of the Ægean, off the shores of Eubœa. Some accounts represent him as dwelling less permanently in the deep places than father Nereus, "the old man of the sea." But, when abroad attending the councils of his brothers on Olympus, or out on the vast plain of the deep, passing swiftly in his boat over the rolling billows, he had under his supreme control the world of waters, and all the forces that affect their movements. When he strikes the calm sea with his trident⁸ the waves rise in their violence to swallow up or dash in pieces the ships and strew with wrecks the shore. But a word or look from him can allay the wildest tempest, and still the tumult of the waters.

For reasons not very apparent, the horse is often mentioned as his favorite animal, and was said to be his gift to men. Possibly it was because the lively imagination of the ancient Greek saw, in the white crested waves that pursued each other in wild commotion, the rearing and bounding of foaming steeds or war-horses, that dash over the plain with resistless force. And his own car they imagined drawn over the waters by coursers swifter than the wind.

Poseidon was especially regarded as their patron and tutelar deity by all seafaring classes, such as fishermen, boatmen, and sailors. When going to sea they addressed prayers to him, and when returning in safety, offered sacrifices in gratitude for their escape from the perils of the deep. His temples, altars and statues were most numerous in seaport towns, on islands, and peninsulas. One much frequented was at Corinth, and there games were celebrated in honor of Poseidon.

HEPHAISTOS (VULCAN).—The fire god, according to Homer, was son of Jupiter and the queenly Juno; or, according to another account of Juno alone, the goddess being jealous over the manner of Minerva's birth from the cleft-skull of her spouse. The little Vulcan was so ill-looking and lame that the proud mother thought to cast him out of their palace, disowned. But though so cruelly treated he always showed some regard for her, and once took her part in a quarrel she had with the king. Jupiter, enraged at this, caught him by the foot and hurled him from the awful height of Olympus. He was a whole day falling, but in the evening alighted on the island Lemnos,⁹ where he was kindly received and nourished for years in a deep grotto of the sea, by Eurymone¹⁰ and The-tis, and afterward, in return for their kindness, he made them many ornaments. Later mythical writers mention his lameness as a consequence of that fall. But Homer, whose authority we follow, represents him as lame from his birth.

Milton, in his "Paradise Lost," evidently alludes to this Grecian myth, though he makes a different application of it

"From morn
To noon he fell, from noon to dewy eve,
A summer's day; and, with the setting sun,
Dropped from the zenith, like a falling star,
On Lemnos, the Aegean isle."

When or how he was restored to Olympus we are not informed, nor whether the time required for the ascent equaled or exceeded that of the fall. Enough, that his presence and useful offices there are subsequently recognized. He may have become mediator between his parents; and at times humorously assumed the role of cup-bearer at the feasts of the Olympians, causing them much merriment as he busily hobbled from one to another presenting the cups of nectar.¹¹

It is probable that their first conception of Hephaistos was that of the god of fire, simply. But as fire is the efficient agent employed in smelting and working metals, he was afterward, and very naturally, regarded as the inventor of furnaces, foundries and forges, including all workshops where skillful artisans wrought in iron and the other metals. With his workmen of skill and Cyclopic strength he constructed all the shining palaces for the immortals on Olympus, and also his own immense workshop with the huge anvils and "twenty bellows" that, at his bidding, worked automatically. He designed and executed numberless articles, both useful and ornamental, suitable for the abodes of either gods or men; and some of their mythical poems and stories are enriched with descriptions of the exquisite workmanship they display. Later ac-

counts mention his workshop as no longer on Olympus, but on some volcanic island where his forges glow with heat and his workmen are equal to any demands made on their skill or strength. Hephaistos, like Athena, gave skill to mortal artisans, and they too were believed to have taught men all things suitable to embellish or adorn their habitations.

In statuary, during the best period of old Grecian art, he is represented as a vigorous, bearded man of muscular frame, and is characterized by the presence of his hammer or some other instrument, and the corselet which leaves the strong, right arm and shoulder uncovered.

The Romans not only changed the name to Vulcan, but regarded Etna as his glowing forge, and Venus as his wife; thus expressing the idea that art and beauty are in harmony.

Some of the principal exploits ascribed to Neptune are the assistance he rendered Jupiter against the Titans; the raising of the island Delos out of the sea; the creation and taming of the horse; and the building of the walls and ramparts of Troy. He was feared also as the author of earthquakes and deluges, which he caused or checked, at his pleasure.

To him they ascribed a numerous progeny. The principal sons were Triton, Phorcus, Proteus, and Glaucus. The chief characteristics of these minor deities of the sea were the power of divination, and ability to change their forms at pleasure. All these, with the sea-nymphs, fifty in number, belonged to the train of Neptune, and were subservient to his will.

TEMPERANCE TEACHINGS OF SCIENCE; OR, THE POISON PROBLEM.

BY FELIX L. OSWALD, M.D.

CHAPTER III.—PHYSIOLOGICAL EFFECTS OF THE POISON HABIT.

"The Stimulant Vice is the principal cause of human degeneration."—Haller.

Science tells us that there is a general progressive tendency in nature. According to the opinion of some modern biologists, all plants and animals have been developed from lower and less perfect organisms, and still continue their upward progress. We may reject that view, or accept it with considerable modifications; but one thing remains certain: Nature does not go backward of her own accord. Wherever the harmony of creation has not been wilfully disturbed the trees are as tall as of yore, the fruits as sweet and the flowers as fragrant. The eagle soars as high as ever, the song-thrush has not forgotten her anthems, nor the swallow her swift flight, the ostrich still scorneth the horse and his rider, it still requires a Samson to rend a young lion. How, then, can it be explained that the noblest work of Nature makes a sad exception to that rule? How is it that man alone is sinking in misery and disease, growing weaker and sicker from century to century, from generation to generation? War has not dealt us those wounds, famine and pestilence can not explain our "ailments and pains, in form, variety and degree beyond description." The influence of all transient causes of evil is counteracted by the healing agencies of Nature. See the children of the wilderness, how soon they recover from hurts and wounds, how completely from the effects of protracted starvation, their offspring as sound as their ancestors in Eden. No, the cause of our degeneracy must be a permanently active cause, and with the assurance of a clear and perfect conviction we can say: That restless enemy of human health and happiness is the poison vice.

Without the redeeming influence of nature, the balm of sleep and the regenesis¹² of every new birth, alcohol alone would

have effected the destruction of the human race. During the gradual development of the vice the adaptive faculties of the human system have somewhat modified its influence, but its real significance reveals itself when its flood-gates are suddenly opened upon an unprepared race. In Siberia, in Polynesia, and among the aborigines of our own continent, the alcohol plague has raged with the destructiveness of the black death;¹³ wigwams, villages, nay, entire districts have been depopulated in the course of a single generation. Among the Caucasian¹⁴ nations, where the vice has gradually progressed from half-fermented must to brandy, its baneful effects are less sudden, but not less certain. From age to age the form created in the image of God has decayed, has shrunk like a building collapsing under the progress of a devouring fire. Wherever intemperance has increased, manhood and strength have decreased. The Anacreons¹⁵ of antiquity indulged in wine only at occasional festivals. The peasants of the Middle Ages were generally too poor to use intoxicating drinks of any kind. But by and by wages improved. Strong ale and brandy were added to the home-brewed beverages of the working classes. Habitual stimulation, once the ruin of the idle aristocrat, became the curse of the masses. The *poison marasmus*¹⁶ became a pandemic¹⁷ plague. The yeomen of ancient England would not recognize their gin drinking descendants; a Norman Knight could have crushed a Stockholm dandy with a single grip of his fist. Challenge the apostles of lager beer, take them to Nuremberg, to the armory of the old City Hall, let them pick their champion from the ranks of the bloated and sickly looking citizens, defy them to find a single man able to wield the weapons that were toys in the hands of the old burghers. Or the advocates of "good, cheap, country wine"—take them to Spain and let them see what the best wine has done for the manliest race on earth. The inhabitants of Castile, of Aragon, Valencia, Barcelona and Leon are the descendants

of the old Visigoths,⁷ a race of rude warriors who overpowered the disciplined legions of Rome as easily as the Romans would have quelled a rabble of African rebels. Gibbon describes their first encounter with the Roman armies, how the imperial general invited the Gothic chieftains to a banquet, where he intended to assassinate their guards and attack their camps during the confusion, and how the Goths were saved by the intrepidity of their leaders: "At these words, Fritigern⁸ and his companions drew their swords, opened their passage through the unresisting crowd, and, mounting their horses, hastily vanished from the eyes of the astonished Romans. The generals of the Goths were saluted by the fierce and joyful acclamations of the camp; war was instantly resolved, the banners of the nation were displayed according to the custom of their ancestors, and the air resounded with the march signals of the barbarian trumpet." No painter's magic could more vividly evoke the forms of that giant race, their chieftains making their way through a crowd of shrinking cowards, the tumult of the camp, and the iron-fisted warriors, receiving their leaders with exultant shouts! And those men were the ancestors of the modern Spaniards—lions shrunk into cats, eagles into mousing hawks! It is idle sophistry to ascribe that result to climatic influences. In a warmer climate than Spain the abstemious Arabs, the Afghans, and the Moors have preserved the vigor of their earliest ancestors. The soil that now produces *lazzaroni*⁹ and *musici*¹⁰ was once trod by the conquerors of three continents. In the snow-bound wigwams of the North American Indians a cold climate has not prevented the ravages of the alcohol plague. Poison has filled more graves than the sword, more than famine, and the plague and all the hostile powers of Nature taken together. The poison vice has shortened our average longevity by twenty years,* has turned athletes into cripples, giants into dwarfs.

Yet that result does not prove the vindictiveness of Nature; but her patience, the infinite patience that has prevented our utter self-destruction by mitigating the consequences of our suicidal follies. At night, while the drunkard sleeps his torpor sleep, the hand of our All-mother cools his fevered brow, the subtle alchemy of the organism allays the effects of the poison while the system performs at least a portion of its vital functions; in every child the influence of ancestral sins is modified by the tendency of redeeming instincts. If it were not for the restless activity of those remedial influences, firewater alone would have caused more havoc than the deluge. From a pessimistic point of view the study of the physical effects of the poison vice might almost justify the conjecture of the biologist Hoffmann. "Nature," says he, "has set limits to the over increase of every species of animals. Insects prey upon smaller insects, minnows upon midges, trout upon minnows, pikes upon trout, the fish-otter upon pikes, and man himself upon the fish-otter. Man himself has no earthly rival, but Providence (*die Vorsehung*) has met that difficulty by making him a self-destructive animal!"

If that shocking idea were not at variance with other facts, one might, indeed, admire the ingenious adaptation of means to ends, for if it were the intention of God to limit our prosperity and afflict us with every possible evil short of absolute annihilation, he could certainly not have chosen a more efficient agent than alcohol.

Alcohol, the rectified product of the vinous fermentation (*i. e.*, decomposition) of various saccharine fluids, and included by chemists among the narcotic poisons, exercises a met-

amorphous effect on every organ of the human body; and no fact in physiology is more incontestably established than that all its *appreciable* effects are deleterious ones. The advocates of alcohol base their claims upon vague theories. The opponents of alcohol base their claims upon obvious facts. It has been asserted that alcohol protects the system against cold, but the exponents of that theory have failed to show how the constituent elements of alcohol can take the place of the natural heat producers, the non-nitrogenous foods; they have also failed to explain a fact established by the unanimous testimony of polar travelers, namely, that a low temperature can be longer and more easily endured by total abstainers than by those who indulge in *any kind* of alcoholic drinks.

Alcohol has been called a "negative food," because it retards the progress of the organic changes; but it has been demonstrated that that retardation is in every case an abnormal and morbid process, and that its results can not benefit the system in any appreciable way, while its deleterious effects are seen in the fatty degeneration of the tissues, the impoverished condition of the blood, and many other symptoms characterizing the influence of insufficient nutrition. Alcohol has been called a positive food, because, *forsooth*, it is derived (by a process of decomposition) from grain, fruits and other nutritive substances. We might as well call mildew a nutritive substance because it is formed by the decay of wholesome food. "There is no more evidence," says Dr. Parker, "of alcohol being in any way utilized in the body, than there is in regard to ether or chloroform. If alcohol is to be still designated as *food*, we must extend the meaning of that term so as to make it comprehend not only chloroform, but all medicines and poisons—in fact, everything which can be swallowed and absorbed, however foreign it may be to the normal condition of the body, and however injurious to its functions. On the other hand, from no definition that can be framed of a *poison*, which should include those more powerful anaesthetic agents, whose poisonous character has been unfortunately too clearly manifested in a great number of instances, can alcohol be fairly shut out."

The antiseptic influence of alcohol was long supposed to constitute a safeguard against malarial diseases, but it has been found that the prophylactic¹¹ effect of distilled liquors is confined to the period of actual stimulation (the alcohol fever), and that in the long run abstinence is from eight to ten times more prophylactic than dram drinking.

Alcohol has been mistaken for an invigorating tonic; but we have seen that the supposed process of invigoration is a process of stimulation, or rather of irritation, and that we might as well try to "invigorate" a weary traveler by drenching him with *aqua fortis*.¹²

On the other hand, it has been proved by ocular demonstration that alcoholic liquids, applied to the living tissue, induce redness and inflammation, and cover the mucous lining of the stomach with ulcerous patches; that they change the structure of the liver, stud it with tubercles and disqualify it for its proper functions, though by obstructing its vascular ducts they often swell it to twice, and sometimes to five times, its natural size. The weight of a healthy liver varies from five to eight pounds, and Dr. Youmans mentions the post mortem examination of an English drunkard whose liver was found to weigh *fifty pounds*, and adds that in spite of this enormous enlargement of the bile-secreting organ, the man died from a deficiency of bile. The records of the Parisian charity hospitals have established the fact that the moderate use of alcoholic drinks during a period of five years is sufficient to permeate the substance of the liver with fatty infiltrations, and that the liver of old drunkards undergoes changes which make it practically a lump of inert matter, a mass of compacted tubercles and scirrhouss¹³ ulcers. Even in the advanced stages of the disorder a large dose of concentrated alcohol rouses the diseased organ into a sort of feverish activity which, however, soon subsides

* Since the end of the seventeenth century—*i. e.*, since a time when medical delusions made every hospital a death trap—longevity has slightly increased, but, as compared with the first century of our chronological era, it has enormously decreased. Peasants outlive men of letters, and yet the records of the ancients show that nearly half their poets, statesmen and philosophers were centenarians. If the years of the patriarchs were solar years their average longevity was 280 years; if they were seasons (of six months), at least 120 years. The Bible years were certainly not months, for men who "saw their children and children's children," can not have died before their thirtieth year.

into a deeper and more incurable torpor. Hence the temporary efficacy and ultimate uselessness (to say the least) of alcoholic "liver regulators."

It has also been proved that alcohol inflames the brain, obstructs the kidneys, impoverishes the blood, and impairs the functional vigor of the respiratory organs.

The infallible necessity of all these results can be more fully realized by a clear comprehension of the proximate causes, which may be summed up in a few words: While the organism has to waste its strength on the elimination of the poison, it must neglect its normal functions, or perform them in a hasty, perfunctory way. Let me illustrate the matter by an apologue.¹⁴ A family of poor tenants occupy a cottage at the edge of the woods. They are honest, hard-working people, trying their best to live within their means, but at a certain hour they are every day attacked by a bear. Before the good man can mend his jacket, before the good wife has cooked her dinner, before the boys have finished their spelling lesson, they have to rally and fight that brute. Sometimes the bear comes twice a day. They generally manage to hustle him out of the premises, but if they return to their cottage the father's jacket is torn into shreds, the dinner is burned, and in the excitement of the row the boys have forgotten their lesson. Their clothes are torn, their hands and faces bear the marks of the scrimmage, the whole household is in a state of the wildest disorder. The poor people go to work and try to repair the mischief the best way they can, but before they have finished the job the bear comes back, and another rumpus turns the house upside down. No wonder that things go from bad to worse, no wonder the tenants can not pay their rent; but a very considerable wonder that the landlord does not relieve them by killing that bear.

The manliest races of the present world are probably the Lesghian¹⁵ and Daghistan¹⁶ mountaineers, who inhabit the southern highlands of the Caucasus,¹⁷ and who defied the power of the Russian empire for sixty-five years. From 1792 to 1858, army after army of schnapps drinking¹⁸ Muscovites¹⁹ attacked them from the north, east and west, and were hurled back like dogs from the lair of a lion, and *fifteen hundred thousand* Russian soldiers perished in the Caucasian defiles before the Russian eagles supplanted the crescent of Daghistan. For the heroic highlanders are Mohammedans, and *total abstainers from intoxicating drinks*. The Ossetes,²⁰ who inhabit the foothills of the northern range, are addicted to the use of *slibovitsa*²¹ (peach brandy) and other stimulants, and their bloated faces present a striking contrast to the clean-cut features of the tribes who have been chosen as the representatives of the white race. They are as stubborn as their southern neighbors, but not as enterprising; as self-sacrificing in the defense of their country, but not as self-reliant. In spite of their healthy climate they are cachectic²² and rather dull witted; alcohol has stunted their stamina as well as their stature.

But there are other forms of physical degeneration which can with certainty be ascribed to the influence of the secondary stimulants, tobacco, tea, coffee, and pungent spices. Tobacco makes the Turks indolent, tea and coffee make us nervous and dyspeptic; and the worst is that those minor vices pave the way to ruin; a constitution enfeebled by theine poison²³ is less able to resist the influence of fusel poison. It is a great mistake to suppose that abstinence from concentrated alcoholic liquors could atone for the habitual use of other stimulants. The vices of our ancestors were gross, but one-sided; ours are more manifold, and in their effects more comprehensive. In France many so-called temperate drinkers indulge in light wine, absinthe, tea, coffee and chloral, and are weaker and sicker than the Hungarian dram drinkers who confine themselves to plum brandy, for the system of the miscellaneous poison-monger has to defend itself against five enemies, and, as it were, sustain the wounds of five different weapons. The mediaeval knights and many Grecian and Ro-

man epicureans could drink a quantity of wine that would kill a modern toper; but they confined themselves to that one stimulant, and showed sense enough to keep it from their boys, who had a chance to fortify their constitutions with gymnastics before they endangered them with alcohol, and not rarely thus fortified their mental constitutions to a degree that made them temptation proof. Pythagoras and Mohammed interdicted wine, and that statute did not interfere with the propagation of their doctrines, for voluntary abstainers were by no means rare—before the introduction of secondary stimulants. We fuddle our schoolboys with coffee and cider, and it is a curious and very frequent consequence of that early development of the stimulant habit that its victim forgets the happiness of his childhood and accepts daily headaches and chronic nightmares as some of the "ills that flesh is heir to." Rousseau believed that a man would be safe against the poison vice if he could reach his twentieth year without contracting the habit, because in the meantime observation would have taught him the effects of intemperance. But his safety would be guaranteed by another circumstance. He would know what health means, and no deference to established customs would tempt him to exchange freedom for chains.

But a still greater mistake is the idea that drunkenness could be abated by the introduction of milder alcoholic drinks. We can not fight rum with lager beer. All poison habits are progressive, and we have seen that the beer vice is always apt to eventuate in a brandy vice, or else to equalize the difference by a progressive enlargement of the dose. Common brandy contains fifty per cent. of alcohol, lager beer about ten; so, if A. drinks one glass of brandy and B. five glasses of beer they have outraged their systems by the same amount of poison and will incur the same penalty. Total abstinence is the safe plan, nay, the only safe plan, for poisons can not be reduced to a harmless dose. By diminishing the quantities of the stimulant we certainly diminish its power for mischief, but as long as the dose is large enough to produce any appreciable effect that effect is a deleterious one.

Various diseases and that artificial disorder called intoxication react on certain faculties of the mind (by affecting their corresponding cerebral organ) as regularly as on the liver or any other part of the human organism. Consumption stimulates the love of life: a self-deluding hope of recovery characterizes the advanced stage of the disease as invariably as the hectic flush that simulates the color of health. Hasheesh excites combative ness. Alcohol first excites and gradually impairs self-reliance, and thus undermines the basis of truthfulness, of private and social enterprise, of manly courage and generosity. Moral cowardice, the chief reproach of our generation, has more to do with the tyranny of the poison vice than with the despotism of social prejudices. The brain stimulating effect of alcohol decreases with every repetition of the dose, and Dr. Theodore Chambers warns us that "however long the evil results of such habitual overtasking may be postponed, they are sure to manifest themselves at last in *that general breakdown which is the necessary sequence of a long continued excess of expenditure over income.*"

Besides, even the temporary results would not justify that expenditure. "Brain workers should confine themselves to *metaphysical tonics*," says Dr. Bouchardat²⁴; "alcoholic drinks, at any rate, are unavailable for that purpose. Even after a single glass of champagne I have found that the slight mental exaltation is accompanied by a slight obfuscation."²⁵ The mind soars, but it soars into the clouds." "Wine stirs the brain," says the poet Chamisso, "but not its higher faculties as much as the sediments that muddle it."

The Arabs have a tradition that soon after the flood, when Nunus (the Arabian Noah) had resumed his agricultural pursuits, a *Ghin*, or spirit, appeared to him and taught him the art of manufacturing wine from grape-juice. "This beverage, O son of an earthly father," said the *Ghin*, "is a liquid of pe-

cular properties. The first bumperful will make you as tame as a sheep. If you repeat the experiment you will become as fierce as a rampant lion. After the third dose you will roll in the mud like a hog." If the *Ghin* had been a spirit of epigrammatic abilities he might have summarized his remarks: "The effects of this liquid, O Nunus, vary, of course, with the amount of the dose. But if you drink it you will infallibly make a beast of yourself."

In the long list of artificial stimulants, with all their modifi-

cations and compounds, there is no such thing as a harmless tonic. Alcohol, especially, is in all its disguises, the most implacable enemy of the human organism. In large quantities it is a lethal¹ poison; in smaller doses its effects are less deadly but not less certainly injurious, and the advocates of moderate drinking might as well recommend moderate perjury. Our lager beer enthusiasts might just as well advise us to introduce a milder brand of rattlesnakes. The alcohol habit in all its forms and in every stage of its development, is a degrading vice.

STUDIES IN KITCHEN SCIENCE AND ART.

III. BARLEY, OATS, RICE AND BUCKWHEAT.

BY BYRON D. HALSTED, SC. D.

BARLEY (*Hordeum vulgare*¹) is thought by some historians to be the oldest of the cultivated grains. Professor Brewer says it was the chief bread plant of the ancient Hebrews, Greeks, and Romans. There are several varieties, the principal ones being the two-rowed and the six-rowed. Like wheat and rye, barley is both a spring and winter grain; though with us the seed is usually sown in the spring.

Barley is the most hardy cereal, and may be successfully cultivated over the widest range of climate. It is grown in central Siberia, northern Russia, and in Lapland to latitude 70°. At the opposite extreme, barley flourishes in semi-tropical countries. In 1880 the area of barley in the United States was 1,997,717 acres, with a yield of 44,113,495 bushels. The average yield, therefore, is not far from twenty-five bushels per acre. Though adapted for a wide range of growth, its cultivation is principally confined to a few states, the leading ones of which are California, with twelve and a half million bushels; New York, seven and two-thirds millions; Wisconsin, five million; Iowa, four millions; and Minnesota, three millions bushels. It will be seen by comparing these figures with the total above given that California and New York produce nearly one half (46 per cent.) of all the barley grown in this country. These two states are very unlike in soil, climate, etc. In California the conditions are not favorable for the growth of oats and corn, and for similar reasons barley is the leading grain in Nevada and Arizona. The cultivation of this crop in New York and other eastern states has been stimulated by the great demand for the grain in the manufacture of beer. It has proved more profitable than wheat in many localities, especially where the latter grain has been infested with the Hessian fly. It is interesting to note that Pennsylvania produces less than half a million bushels, or not over one eighth as much as New York. This only shows, as is abundantly illustrated in many other cases, that market, soil and climate may have everything to do with the area devoted to any particular crop.

Barley was largely grown by the early settlers of New England, who used the grain for making bread, but for this purpose corn supplanted it in later years, it being better fitted for table dishes. Barley forms an important food for domestic animals, the greater part of the immense quantities grown on the Pacific coast being used for this purpose. Professor Brewer says: "Only a very insignificant quantity is used for food in this country; less than of any other cereal." "Pearled barley" is the grain with the outer hull removed, and in this condition it is used to a considerable extent in soups and in other foods. The following is the chemical composition of barley, pearled barley and barley meal:

WATER.	ASH.	ALBUMINOIDS.	FIBER.	STARCH, GUM, &c.	FAT.
Barley 11.09	2.47	12.41	2.89	69.32	1.82
Pearled B. . . . 11.82	0.98	8.44	0.32	77.76	0.68
Barley Meal. . . . 9.85	3.77	12.68	7.00	63.46	3.24

The chemical constituents of barley do not vary greatly from those of wheat. There is more ash and fiber because the hull is thicker. It is seen that the per cent. of these two constituents is much reduced in the analysis of the pearled barley, in which the outer covering is removed. We here have a demonstration of the fact that the starchy matters are more abundant in the central part of the grain, while the albuminoids, ash, fiber, and fat abound near the surface. Barley, when ground into meal, makes a rich feed for live stock.

The chief use now made of barley grown in the eastern states is in the making of beer. Barley has been employed for this purpose from very early times. The old Egyptians made beer, and the ancient Greeks and Romans were acquainted with its manufacture, as well as with its effects upon the human system. The process is as follows: First soak the grain in water, and then allow it to germinate or sprout. Chemical changes take place in the starchy materials of the grain, by which they become soluble in water. After the sprouting has advanced far enough the grain is heated and dried, when the product is called malt. This malt, or kiln-dried sprouted grain is ground or crushed between rollers, and placed in mash tubs with warm water. During this gradual heating the changed starch is dissolved by the water. After the infusion settles the clear liquid is drawn off and boiled in a vessel with hops. The boiling liquid is strained, cooled, and run into the fermentation vats, where yeast is added. During the fermentation a part of the sugar derived from the starch is converted into alcohol. After a refining process the beer is ready to go into the casks. Ale, Scotch ale, small beer, porter, stout, and lager beer are the malt products of barley. The amount of capital now invested in the manufacture of beer is very great, and to those who carefully measure the evils of the beer shop it seems like a very poor place for one's money.

Barley is imported in large quantities from Canada, in 1880 the amount being over seven million bushels, chiefly for malting. Enormous quantities are imported by Great Britain from several countries, the leading being Turkey, France, Germany and Russia. Professor Brewer says: "The cultivation of barley is doubtless on the increase, and there are many reasons, too, for the belief that its production in America will very greatly increase during the present century."

The enemies of barley are nearly the same as those of wheat. It is more free from rust and smut, and less liable to be attacked by insects. The crop, though disagreeable to harvest, owing to the penetrating beards and poisonous effects to many who handle the straw, is a comparatively sure one.

OATS (*Avena sativa*²) rank third in importance among the grains grown in the United States. The native country of the oat is not certainly known. "It was cultivated by the prehistoric inhabitants of Central Europe and is found in the remains of the lake habitations³ in Switzerland." In Scotland

Oats have long been a leading crop for human food, and in compiling his dictionary, Dr. Johnson took occasion to fling sarcasm at the Scotch by defining oats as being a food for horses in England and for men in Scotland. Had he lived now, and seen how generally oats are employed as an article of human food, his definition would have been far different and much more valuable. It is due to Scotland, in passing, to say that she produces a very superior quality of oats.

There are many varieties of oats, all of which have probably arisen from the same species of *avena*. The ordinary oats have the hull or husk adherent to the kernel, and are divided into two classes. In one, the flower cluster branches from both sides of the stem, while in the other, the branches are all upon one side. There is a group of "skinless" sorts, but little grown, in which the husk separates from its contents.

The total area in oats in the United States in 1880 was 16,144,593, with a yield of 467,858,999, or an average of not far from twenty-nine bushels per acre. Illinois, Iowa, New York, Pennsylvania and Wisconsin lead in the amount of oats grown, and in the order mentioned. These five states produce over half of all the oats grown in this country. Maine, Vermont, New York and Wyoming raise more oats than any other grain.

Oats vary greatly in weight per bushel, the heaviest being produced in a cold, moist climate. In Scotland they frequently weigh fifty pounds to the bushel, while with us the legal weight is thirty-two, with a range of from twenty to forty-five pounds to the bushel. Oat straw is much relished by sheep and cattle, and is superior to that of barley or wheat. Oats are grown extensively in some localities as a substitute for hay, and are cut before they begin to ripen. They also make an excellent forage crop, and after being pastured off the ground the soil is left in a fine condition for the next crop.

The chemical composition of oats and oat meal is as follows:

	WATER.	ASH.	ALBUMINOIDS.	FIBER.	STARCH, &c.	FAT.
Oats,	10.56	2.95	11.41	9.01	61.10	4.97
Oat meal,	7.85	2.01	14.66	0.86	67.56	7.06
Corn meal,	15.97	1.27	8.19	1.61	69.50	3.46
Graham	13.09	1.77	11.67	1.87	69.89	1.71

The composition of corn meal and Graham is given for the sake of a convenient comparison. It will be seen that oats, and especially the meal, or flour, is rich in nitrogenous or muscle forming compounds, namely, the albuminoids. There is also a very large per cent. of fat, and less starch than in corn or wheat.

Of the nutritive value of oatmeal Professor Brewer notes: "Whether it is true that oatmeal is actually more wholesome or more nutritious than cracked wheat, for example, is very questionable, but it certainly is more palatable to work people. In the United States oatmeal in any form has been but sparingly used for human food until within a few years, but of late its consumption has increased enormously, many grocers now selling as many barrels a year as they sold pounds less than a score of years ago. This increase in the use of oatmeal is most marked in the cities of the older states, but it has extended to the villages and farms and even to the farthest frontier settlements."

The enemies to the oat crop are not as many as of wheat. The rust and smut do some injury, as also the insects that feed upon wheat and other cereals.

RICE (*Oryza sativa*) it is believed enters more largely into the nourishment of the human family than any other plant. It is a native of the East Indies, but is now cultivated in most tropical and sub-tropical climates. The rice plant requires an abundance of water in the soil, and thrives best on land subject to overflow for a portion of the year, or which is artificially flooded. Rice is most largely grown in India, China, Japan and Egypt—India alone producing nearly thirty million bushels per year. The rice grown in this country is confined to eight states, with an area of 174,173 acres in 1879, and

a yield of 110,131,373 pounds, averaging 632 pounds per acre. Ninety per cent. of this crop is grown in the three following states: South Carolina, Louisiana, and Georgia. It is seen that the region suited to the growth of rice is much more limited than with the other cereals. The following description of rice growing in the South is from the *American Agriculturist*: "The method pursued on the rice lands of the lower Mississippi is to sow the rice broadcast about as thick as wheat at the North, and harrow it in with a light harrow having many teeth, the ground being first well plowed and prepared by ditches and embankments for inundation at will. It is generally sown in March. Immediately after sowing the water is let on so as to barely overflow the ground. The water is withdrawn on the second, third or fourth day, or as soon as the grain begins to swell. The rice very soon after comes up and grows finely. When it has attained about three inches in height the water is again let on, the top leaves being left a little above the water. Complete immersion would kill the plant. A fortnight previous to harvest the water is drawn off to give the stalks strength and to dry the ground for the convenience of the reapers." * * * The same area of ground yields three times as much rice as wheat. * * * Rice, like hemp, does not impoverish the soil. * * * The pine barrens of Mississippi would produce rice *ad infinitum* if it were not that the land, after a few years, owing to the sandy nature of the soil, becomes too dry for it. * * * No variety has been discovered which yields as much out of the water as it does in it. * * * It flourishes better when overflowed with pure running water than with the stagnant waters of impure lakes and marshes."

The chemical composition of rice grain is as follows: Water 12.44, ash 0.38, albuminoids 7.44, fiber 0.19, starch, etc. 19.20, fat 0.35. It is seen to contain a less amount of the flesh forming or albuminoid compounds, and a greater per cent. of heat producing or starchy matter, than the other grains. The flour contains so little gluten that it can not be made into light bread. Rice is familiar to all as white, pearly grains, which are employed as the leading ingredient of puddings, etc. The outer covering or husk is removed in the process of threshing, but to separate the inner requires expensive machinery. "The rough rice is first ground between very heavy stones running at a high speed, which partially removes the hull chaff. The grain is conveyed into mortars, where it is pounded for a certain length of time by the alternate rising and falling of very heavy pestles shod with iron. From these mortars elevators carry the rice to the fans which separate the grain from the remaining husks. From here it goes through other fans which divide it into three qualities—'whole,' 'middling' and 'small.' The whole rice is then passed through a polishing screen, lined with gauze wire and sheepskins, which, revolving vertically at the greatest possible speed, gives it the pearly whiteness with which it appears in commerce." The "small" rice is sometimes ground and employed to adulterate wheat flour. Rice, when prepared in the many forms of puddings, cakes, soups, etc., is very easy of digestion, and is specially fitted for the food of invalids. In Japan, where the rice crop is a leading one, an alcoholic drink called *sake* is made from it. A wine is made in China from this grain, and the *Arrack* of the East is also a rice beverage.

BUCKWHEAT (*Polygonum esculentum*). The six grains already treated in this and the preceding article are all members of the great grass family. The remaining cereal belongs to another and distantly related group of plants. Buckwheat is a member of a small family containing the knotweeds, bindweeds, smartweeds, dock and rhubarb. The buckwheat plant in its growth and structure is very different from the grasses. It is supposed to be a native of northern Asia, and has been cultivated for its large, triangular seeds, from very early times. The name is derived from the German *Buck-weizen*, "beech wheat," the shape of the grain closely resembling that of the beech nut.

The buckwheat crop in the United States for 1879 was 11,-

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817,227 bushels, for 848,389 acres, or about fourteen bushels per acre. The increase in the total yield of buckwheat is not keeping pace with the increase in population. New York and Pennsylvania are the leading buckwheat producing states, sixty-eight per cent. of the whole crop of 1879 being grown within their borders. Hilly regions, with a thin soil, that are not suited to other grains, may be profitably devoted to growing buckwheat. It is known as a "wide feeder;" that is, the buckwheat plant produces long, wide-spreading roots which penetrate the poor soil for long distances and gather nourishment over a wide area. On this account this crop is frequently grown on worn-out soil and plowed under while green as a fertilizer, in preparation for some other crop requiring more plant food close at hand in the soil. The period of growth is short, being sown in midsummer and harvested before the autumn frosts have an opportunity to injure it. It frequently serves a good purpose as a second crop where the first has failed from poor seed, bad weather, destructive insects, or one or more of these or other causes. The grain is especially wholesome for poultry, and while the field is in bloom bees harvest a larger store of honey, though not of the best quality.

The chemical composition of buckwheat and its flour is as follows:

WATER.	ASH.	ALBUMINOIDS.	FIBER.	STARCH, &c.	FAT.
Buckwheat . . 12.62	2.02	10.02	8.67	64.43	2.24
B. flour . . 13.52	1.05	6.48	0.28	77.34	1.33

The albuminoids are seen to be only about half as abundant as in wheat flour. The fiber (bran) is in large quantity and the starchy matter abounds. As a food buckwheat is less strengthening but somewhat more fattening than wheat. The popular notion that buckwheat when eaten regularly will induce a feverish state of the system and eruption of the skin, is probably well founded. The plant belongs to a family, many members of which have peculiar medicinal principles, and doubtless there is some oil or other substance present in the

buckwheat that does not appear in a chemical analysis, though active upon the animal system.

There are very few enemies to the buckwheat plant. So infrequent are the attacks of insects that the crop is recommended by Professor Riley as a means of driving insects away from fields. It is a very cleansing crop as regards weeds also, the rank growth smothering out the various forms of plant pests that may spring up. The buckwheat field is, of course, not exempt from the ravages of those insects like locusts and army worms, that devour everything green in their line of march.

OTHER CEREALS.—Small quantities of a number of other cereals have been and are still cultivated in the United States. There are several millets grown for forage, but the aggregate amount is only a trifle compared with the other cereals, and they are not on the increase. One of these millets is quite extensively grown for the dried branches of the seed-bearing tops called the "brush," and is familiar to every housekeeper as brooms, when attached to long handles. Another variety of the very fertile species, *Sorghum vulgare*,⁶ is the durra or doura grown to some extent in the Southern States as a forage crop. But it is not our purpose to discuss the many varieties of plants that have been experimented with or are grown to only a small extent. Professor Brewer, than whom there is no better authority, and who has been laid under liberal contribution for facts in our two papers on the cereals, says: "The established cereals have been so long cultivated, are so differentiated into varieties, so adapted to different phases of cultivation, and to various uses to which man applies them, that it seems probable that the number will not be materially increased in cultivation, and, moreover, in our agriculture Indian corn so fills a part which in other countries is occupied by a number of other plants, either for forage or bread, that it will doubtless continue to exclude various species whose cultivation is practiced elsewhere." If we do the best we can with the six cereals now grown we will have no cause for distress.

THE CEREALS: BARLEY, OATS, RICE AND BUCKWHEAT.

The cereals furnish the cook materials for many of her most valuable articles of food. Wholesome, easily prepared, and inexpensive, their use on the table can not be too strongly commended. Barley is not in general use among Americans, but the pearl barley ought to form an indispensable article in every larder. In soups it is excellent. The stock for barley soup should be made with the greatest care. Into your soup-kettle—every housewife needs one—put a carefully washed beef bone, and with it all your scraps of cold meat, trimmings from steaks, and bones of chickens, turkey and beefsteak. Put your meat into cold, clear water and for the first half hour allow it but a moderate heat; after that the pot should be placed on the back of the stove, allowing the soup to simmer for four or five hours. This low heat extracts all the juices from the meat, and, this done, the liquor should be strained and allowed to cool. When ready to use the thick layer of grease which forms on the top of the stock should be removed, and the vegetables—the more the better—which are to flavor the soup added. Allow this to simmer until the vegetables have given up their juices, then strain, and into your soup put pepper and salt, with a cup and a half of barley, and allow the whole to come to a boil. Serve hot. Cold and greasy soup is detestable. To prepare the barley for use it should be soaked for several hours and cooked until soft over a slow fire.

BEEF WITH BARLEY.—Beef is nice served with barley. A beef roast may be garnished with barley which has been boiled, and a steak is oftentimes served in barley. Pieces of cold beef may be warmed over with this cereal in the following way:

Mince into dice the scraps of meat, butter a sauce pan thoroughly, pour in a little water and add equal quantities of the minced meat and cold boiled barley. Stir until hot, then pour in two eggs slightly beaten, and stir until the eggs are cooked; season with salt and pepper. Cold mutton may be prepared with rice in the same way.

BARLEY FOR THE SICK.—"From the times of Hippocrates¹ and Galen,"² says a writer, "barley drinks have been in high repute in febrile and inflammatory complaints. They possess mild, soothing qualities, while at the same time they impart nourishment." For *barley water* the following is a standard recipe: Wash pearl barley in four waters, rub two or three pieces of sugar on a lemon cut open and put them in a jug with the washed barley and a few slices of lemon; then pour boiling water over the whole and cover it until it is cold. *Barley gruel* is made by boiling two ounces of the pearl barley in half a pint of water, strain off this water and put the barley into three pints and a half of salted boiling water, and let it boil half away, then strain it for use.

OATMEAL.—Of the good qualities of this Scottish favorite, most of us are aware. "Oatmeal is," says one authority, "when eaten with milk, a perfect food, having all the requisites for growing children and the young generally. Oatmeal requires much cooking to effectually burst its starch cells, but when it is well cooked it will thicken liquid much more than equal its weight in wheaten flour. The oats of this country are superior to those grown on the continent and in the southern parts of England, but certainly inferior to the Scotch, where considerable pains is taken to cultivate them; and it is needless to

point out that the Scotch are an example of a strong and robust nation, which result is justly set down as being derived from the plentiful use of oatmeal. Dr. Guthrie has asserted that his countrymen have the largest heads of any nation in the world—not even the English have such large heads—which he attributes to the universal use of oatmeal." The almost universal method of using oatmeal is in porridge, or mush, as we almost always call this excellent dish. There are two methods of preparing mush: To one quart of boiling water add one teaspoonful of salt; take a heaping cupful of oatmeal and sprinkle it slowly in with one hand while it is stirred with the other. When the meal has been all put in it should not be stirred more than is necessary to keep it from burning at the bottom. If much stirred the porridge will be starchy and flavorless. A better porridge may be made by stirring at night into two pints of salted boiling water half a pint of oatmeal. Let it boil for two or three minutes, then cover closely and place on the back of the range where it may simmer until breakfast time. Oatmeal may also be steamed. *Fried oatmeal* is a nice breakfast dish. Take steamed oatmeal when it is cold, cut it in thin slices, and fry until it is brown in a little lard or butter.

OATMEAL GRUEL.—A valuable item on an invalid's bill of fare is oatmeal gruel. "Take two tablespoonfuls of oatmeal, half a blade of mace, a piece of lemon peel, three gills of milk, and a little sugar. Mix two spoonfuls of oatmeal until smooth in a little milk, and stir it gradually into the remainder of the milk; add the lemon peel and blade of mace; set it over the fire for fifteen minutes, stirring it constantly. Then strain it and add sugar to taste."

RICE.—For simply boiling rice we have an excellent "black man's recipe" given in one of our favorite cook books by an old sea-captain friend of ours. Here it is just as it was told the "captain": "Wash him well; much wash in cold water; the rice, flour, make him stick; water boil already very fast; throw him in, rice can't burn, water shake him too much; boil quarter of an hour or a little more; rub one rice in thumb and finger; if all rub away him quite done; put rice in cullender, hot water run away; pour cup of cold water on him, put back rice in saucepan, keep him covered near the fire, then rice all ready; eat him up."

Equally good is rice cooked by steaming. After washing thoroughly, soak for an hour in warm water, three pints of water to one of rice. Set the dish containing the rice and water in which it has been soaking into the steamer and allow it to steam for an hour. It should be salted after put to steam and stirred frequently. Milk may take the place of part of the water.

RICE WAFFLES.—Into one and a half pints of flour stir a little salt, and rub in evenly a piece of butter the size of a walnut, add three beaten eggs, mixed with half a teacupful of sweet milk, one and a half pints of boiled rice and half a teacupful of sour milk, with one teaspoonful of soda; bake immediately in waffle irons. Rice pancakes may be made by adding an extra half cupful of milk. These pancakes may be served with jelly. When hot from the griddle spread them with butter and almost any kind of preserves or jelly; roll them up as you do roll jelly-cake, cut off the ends, arrange them on a platter, sprinkle sugar over the tops, and serve immediately.

RICE SERVED WITH MEAT.—Rice may be used as a side dish with any kind of meat. *Risotto à la Milanaise*⁸ is a favorite dish. Put one ounce of butter into a stew-pan and when hot mix in a quarter of a small onion minced, cook until it turns yellow; put in a cupful of uncooked rice and stir it until it has become yellow from the butter and onion; now add a pint of stock and boil slowly until the rice is tender. The stock should be nearly all absorbed; before serving add an ounce of grated cheese and stir for a few moments over the fire without letting it boil. Sprinkle a little grated cheese over the top. Another very simple side dish is prepared from rice by

ro-mixing a tablespoonful of minced parsley or shives into a pint of boiled rice. Put an ounce of butter into a sauce pan, heat it until it becomes a light brown; mix the rice in the butter and serve as a vegetable.

DESSERTS FROM RICE.—The rice pudding is undoubtedly the standard rice dessert, but it is only one of numberless wholesome and toothsome dishes which may be prepared. The simplest form of this pudding and the most delicious is a simple compound of rice, sugar and milk. To two quarts of milk add one cupful of rice and one of sugar, a small pinch of salt, and the desired flavoring. Place the mixture where it will heat very slowly. When the milk becomes boiling hot place the pudding in a slow oven and let it bake for an hour. Do not stir after placing in the oven. A more elaborate pudding is made by dissolving a tablespoonful of corn starch in three cupfuls of milk; add the yolks of two eggs beaten into three-quarters of a cupful of sugar. Put this mixture over the fire and when hot add one cupful of hot boiled rice; stir this until it thickens, then take it off the fire and add the flavoring. Put it into a pudding dish and place in the oven until it is slightly brown; remove and spread over the top the whites of two eggs beaten to a stiff froth and thickened with a little sugar, return the pudding to the oven for a few minutes until the frosting is of a delicate brown color.

Among the many other practical and excellent desserts of rice, the following from Mrs. Henderson's "Practical Cooking" we know to be good:

RICE CONES.—Mould boiled rice, when hot, into cups which have been previously dipped in cold water; when cold turn them out on a flat dish; with a teaspoon scoop out a little of the rice from the top of each cone, and put in its place any kind of jelly. Any sauce preferred may be served with it.

RICE CAKE WITH PEACHES.—Cook the rice in a steamer with milk, and when still hot add a little butter, sugar, and one or two eggs. Butter a plain pudding mould, strew the butter with bread crumbs and put in a layer of rice half an inch thick; then a layer of peaches, and continue alternate layers of each until the mould is full. Bake this for about fifteen or twenty minutes in an oven; when done turn the cake out of the mould, and pour into the dish any desired sauce. Other fruits may be used with rice in the same way.

ORANGE SNOW BALLS.—Boil some rice for ten minutes, drain, and let it cool. Pare some oranges, taking off all the thick, white skin; spread the rice in as many portions as there are oranges, on pudding cloths. Tie the fruit, surrounded by the rice, separately in these and boil the balls for an hour; turn them carefully on a dish, sprinkle over plenty of sifted sugar, serve with sauce or sweetened cream.

APPLE SNOW BALLS may be prepared in the same way, the apples being pared and cored without dividing them.

RICE CROQUETTES.—Soak a half a pound of rice three or four hours in water; drain and put into a basin with one quart of milk and a little salt. Set the basin in the steamer and cook until thoroughly done; then stir in carefully one teacupful of sugar, the yolks of two eggs, a very little butter and flavoring. When cold enough to handle, form into small balls; press the thumb into the center of each; insert a little marmalade or jelly of any kind, and close the rice well over them; roll in beaten eggs (sweetened a little) and bread crumbs. Fry in boiling hot lard.

RICE FOR THE SICK.—Rice jelly is an excellent food for invalids. It is made from rice flour, two heaping teaspoonfuls of which are mixed with water and made into a thin paste. This paste must be stirred into a cupful of boiling water, and the whole sweetened. It should be boiled until it is transparent and then put into a mould.

GROUND RICE MILK is prepared by boiling together two tablespoonfuls of ground rice with a pint of milk. Sweeten it according to taste, adding the juice of a lemon. Let it boil half an hour over a moderate fire.

PARCHED RICE.—Brown rice as you do coffee. Put into boiling salted water and cook thoroughly; serve with cream and sugar.

BUCKWHEAT.—Our last cereal, buckwheat, bears the burden of many complaints. It is called the cause of much of our dyspepsia, and in many households it has been displaced by corn, rye or flannel cakes. As usually made buckwheat cakes are heavy, greasy and sour. Great quantities of butter and syrup are consumed with them to hide the taste of the cake itself, but when properly made there is little doubt but that they are as digestible as any warm breakfast cake. An unfailing recipe is the following, which if a little more troublesome than

the usual method, still is worth the trouble. Add to two quarts of boiling water half a pint of corn meal, wet with a little cold water; boil until it forms a thin gruel, to which, when cool, add half a pint of wheat flour, three pints of buckwheat flour, one gill of yeast, and a little salt. The imperfect fermentation or rising of the batter causes most of the "heavy" cakes. To avoid this set your batter thus prepared at noon of the day before you use them; in the evening beat them well and let them rise in a cool place until morning. A little soda and a little warm water are the only additions which will be required before baking for breakfast.

HOME STUDIES IN CHEMISTRY AND PHYSICS.

BY PROF. J. T. EDWARDS, D.D.

Director of the Chautauqua School of Experimental Science.

III.—CHEMISTRY OF AIR.

A quaint old book called "The Tin Trumpet" remarks that "three bad mothers have borne three good daughters." Long-Suffering begat Patience, Astrology gave birth to Astronomy, and Chemistry is the daughter of Alchemy. The facts of science have taken the place of the fancies of the early investigators. Men used to be attacked, when they entered ravines and caverns, by supernatural beings, as they supposed, who choked, and sometimes killed them. In 1754 Joseph Black showed that these fatal results were due alone to the presence of an invisible gas, which he called "fixed air," as he found it locked up in limestone. "Geist," the name invented by Van Helmont to represent this strange power, signified ghost or spirit, so that the "ghosts" of the seventeenth century are the gases of the nineteenth. The word gas is derived from *geist*.

In studying the history of science we often wonder at the near approach which men made to truths which remained undiscovered for a long time after. One finds, all along, intimations of approaching disclosures which resemble those peculiarities in animals and plants that the geologist notes in the lower strata of the rocks, as prophesying the development of future species. The astrologer failed in his attempt to read human destiny, but he led men forward to the time when, in the stars, they should read the "thoughts of God." The alchemist did not succeed in distilling the "elixir of life," but he prepared the way for chemists to make those useful discoveries which have greatly promoted the safety and comfort of men and extended the period of human life. Some of the most important investigations in which science is now engaged

concern the character and contents of that all-pervading aerial ocean which surrounds our earth to the height of from fifty to five hundred miles. Pure air is one of the great essentials of health and life. How to secure it is a difficult but bénéfice inquiry which the spectroscope, microscope and chemical analysis may yet answer.



NITRIC ACID DISSOLVING COPPER.

EXPERIMENT.—Place copper in nitric acid. Also try iron and zinc successively.

COMPOSITION OF AIR.

Air is a *mixture*, and not a compound. This distinction, as before intimated, is one of great importance. A cup of coffee is a good illustration of the former; there we have united water, coffee, cream, and sugar, but no new substance is thereby produced, and each of these ingredients may be removed without affecting the others. Gunpowder is a mixture, being composed of sulphur, nitre, and charcoal—a most admirable mixture it is, too, for every particle of it contains these three substances, as may be shown; the sulphur may be removed by heat, and the nitre by washing, leaving the carbon alone; the microscope also would reveal in each grain these three substances. That the air is a mixture can be proven in two ways. First, water will absorb each of its two principal ingredients, and, secondly, they do not exist in air in that definite ratio which always characterizes chemical combination. The principal materials in air are oxygen, nitrogen, carbonic di-oxide, watery vapor, ammonia, and very minute portions of many other materials. Professor Steele says, that if the entire atmosphere were compressed to the density of that immediately surrounding the earth, it would extend above it only about five miles. Now, if the substances entering into its composition were to be arranged in the order of their specific gravity, watery vapor would form a sheet about the earth five inches deep, carbonic di-oxide another just above it, thirteen feet in depth, then a layer of oxygen one mile thick, and nitrogen another layer above that, four miles in thickness.

In short, four-fifths of the air is nitrogen, about one-fifth is oxygen, four ten-thousandths is carbonic acid, and water



CARBONIC DI-OXIDE FROM THE LUNGS PASSED INTO LIME-WATER (CaO_2H_2).

EXPERIMENT.—Dissolve some quicklime (CaO_2H_2) in water. Let it settle and pour off the clear part. Blow your breath into this. What follows, and why?

exists in variable quantities. It will be readily seen that the chemical and physical changes constantly going on in the surface of the earth must be throwing off other materials into the atmosphere. For example, the spectroscope has shown that common salt exists almost everywhere in the air. This arises from the fact that the ocean surrounds all lands, and its yeasty waves are broken into foam which is caught up by the winds



PHOSPHORUS BURNING IN AIR.

EXPERIMENT.—Prepare nitrogen as described elsewhere in this article.

and borne over the whole earth. One of the most remarkable facts connected with this subject is the wonderful uniformity of this mixture. Upon the whole, the amount of each ingredient is nearly the same. Some slight variations, such as the following, are observable: More CO_2 is found near cities than in the country, and there is more of the same over the land than over the sea. That the substances which enter into the composition of air do not arrange themselves according to weight, is due to a most interesting law called

THE DIFFUSION OF GASES.

By this we mean that gases tend to intermingle, the lighter even descending, and the heavier ascending, until they occupy the same space. This can be shown in the following manner: Fill one bottle with hydrogen, and another with carbonic acid gas, fit into each a cork, perforated so as to admit a tube, connect the two by inserting a tube, placing the bottle of hydrogen above with the top downward; although the carbonic acid is twenty-two times heavier than the hydrogen, in an hour or two it will rise into the bottle above, as can be proved by pouring into it some lime water, which will immediately become milky, showing that the carbonic acid has united with the lime, forming calcium carbonate. That the



SILVER COIN DISSOLVING IN NITRIC ACID.

EXPERIMENT.—Place a five-cent piece in some nitric acid for two or three hours. Drop into a portion of the liquid a little salt; you show the presence of the silver. Drop into another portion some aqua ammonia; the blue color reports the presence of the copper.

hydrogen has passed down into the other bottle may be demonstrated by first absorbing such portions of the carbonic acid as still remain by pouring in cream of lime, when there will be found still in the bottle a substance (hydrogen) which will burn with a faint yellowish light. Another pleasing experiment may be performed in the following manner: Take an unglazed porcelain cup, fit to it a brass cap, perforated so as

to admit tightly a long glass tube, insert one end of the tube into some colored water contained in a goblet, the inverted cup being supported above on the other end of the tube; now hold over the cup a jar filled with hydrogen; bubbles will soon be seen escaping through the water from the lower end of the tube, showing that the hydrogen has entered and mingled with the air; remove the jar, and the liquid will rise in the tube, proving that the gas has escaped from the cup. This diffusive force in the atmosphere prevents the accumulation of noxious gases by distributing them throughout the whole mass. The constant agitation of the air in gales and storms facilitates this operation, and it is only in certain confined places like caves, such as the Grotto del Cane,¹ mines, and wells, that we find apparent exception.

Lieutenant Maury has said that the atmosphere makes the whole world akin. The breezes that blow over *our* land may in turn visit every other, carrying bane or blessing. Alas! we fear, to-day, that the feverish breath which poisons the air of Italy may spread its pestilence to our shores. One lesson we learn from this is, that the misery or prosperity of any one portion of the earth may affect every other; and that which benefits a part, contributes in this way a blessing to the whole.

NITROGEN.

In our first article of this series somewhat extended reference was made to oxygen, and we shall therefore not dwell upon that element at this time.

Nitrogen, which constitutes by measure 79.04, and by weight 76.8 of the air, is remarkable for the absence of positive qualities. It is a colorless, tasteless, odorless gas, will not burn;



MERCURY DISSOLVING IN NITRIC ACID.

nor support life or combustion. Its chief office is that of a diluter. Without it we should live too fast; even as it is we live too fast! With oxygen alone to breathe, ours would be a short and fevered existence. All flames and fires would be kindled into furious combustion, stoves themselves would burn, and the very "elements melt with fervent heat."

We can prepare air artificially, by mixing one part of O with four parts of N, thoroughly shaking them together. Nitrogen can easily be obtained in the following manner: Make a small cavity in a piece of cork; line this by sifting into it a little plaster or crayon dust. Place the cork on some water in a deep plate. Insert now in the cavity a piece of dry phosphorus (always handle phosphorus with care), touch the P with a heated wire, and quickly place over it an inverted jar. White fumes will instantly rise, which are phosphoric anhydride, P_2O_5 . These will be quickly absorbed by the water, and the water will rise and fill one-fifth of the jar. It will be necessary to add water as that in the plate rises. The remaining four-fifths of the jar will be occupied by nitrogen.

The following is an instructive experiment: Take two jars of equal size (one open at both ends), one of which is fitted with a stopper; fill one with O and the other with N. Place a smooth glass plate under each before removing the pneumatic trough, and holding the plates closely over the top, invert one jar on the other—plate to plate—the jar of O being below. Now carefully remove the plates, and also the stopper from the jar of N, and quickly insert a lighted taper with a long snuff. As it descends through the N it will be extinguished, but as it

enters the O it will be rekindled. This may be repeated many times by raising and lowering the taper. N does not seem to be strongly attached to anything; that is, it has but slight affinity for the substances with which it combines. Strange enough, from this sluggishness results a marvelous activity. Being held with such little force it is liable at any time to be liberated in the form of a gas, and the decomposition of the whole compound of which it formed a part will take place. Hence, instability is the most marked characteristic of N. It reminds one of some loafer, without steady occupation or aims, restless, vacillating, but always a factor in every turbulence or outbreak.



BISMUTH DISSOLVING IN NITRIC ACID.

Gunpowder, gun-cotton, nitro-glycerine, and dynamite all contain N, and their explosive character depends largely upon its presence. Nitrogen and chlorine form a compound, which explodes with such terrific violence that its manufacture should never be attempted by students.

Nitrogen iodide is another of these dangerous combinations. It can be made in very small quantities, however, in the form of a black powder, which may be handled with impunity while it is damp. The touch of a feather, or a zephyr, will sometimes explode it when dry. It is almost impossible to keep it; the jar of a foot-fall or slamming of a door is often sufficient to liberate the unstable nitrogen, and the substance disappears with a loud report. The tremendous rending force of dynamite is well known. A small charge in a torpedo will sink a ship. The Greely Relief Expedition used it to open their way through the arctic ice fields. Its atoms rush apart with such frightful velocity that if a pound of it be exploded upon a naked boulder, of many tons weight, the rock is shivered into fragments.

COMPOUNDS OF N AND O.

At every breath we take into the lungs a mixture of N and O. The operation is not only harmless, but essential to life. When, however, N and O are compounded, the resulting substances are very different. Nitrous oxide (N_2O) forms the well known laughing gas, which breathed, produces for a time a species of intoxication, and if its inhalation is continued, results in insensibility. Nitric oxide (NO) when first formed consists of suffocating red fumes, while nitric acid (HNO_3) is a very corrosive liquid which will cauterize flesh, and acts with great energy upon most of the metals. It is sometimes termed aqua fortis, and is much used in etching upon copper. The surface of the metal plate is covered with varnish or wax, upon which the design is then traced by a sharp pointed instrument. The acid is then applied and remains until, in the judgment of the artist, the impression is deep enough. Any one can easily etch his name, in this way, on a knife blade, or make a stencil plate from a thin strip of brass or copper. Silver, copper, mercury, lead, zinc, iron, bismuth can all be dissolved by nitric acid.

The five compounds of N and O admirably illustrate the laws of atomic combination. Their symbols are as follows: Nitrogen monoxide, N_2O ; nitric oxide, NO; nitrogen trioxide, N_2O_3 ; nitrogen peroxide, N_2O_4 ; nitrogen pentoxide, N_2O_5 . A careful examination of the weights of these substances, which may be made by consulting some good chemical manual, will show that there is an exact ratio of combination, their pro-

portional weights being respectively as $1\frac{1}{2}$ to 1, $1\frac{1}{2}$ to 2, $1\frac{1}{2}$ to 3, $1\frac{1}{2}$ to 4, $1\frac{1}{2}$ to 5. Since atoms can not be divided they must combine atom for atom, or in multiples. This principle has been more fully stated in the form of six

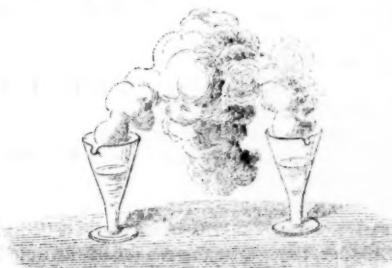
LAWS OF COMBINATION.

The first law of weights says that the elements of a given compound always unite in the same proportions, by weight. The second law is, that if two or more substances unite to form several compounds, their highest combining proportions will always be multiples of their lowest combining weights. The third law announces that the combining weight of a compound is the sum of the combining proportions of its constituents. The volumetric laws are as follows: 1. If two or more elements unite to form a compound, their proportion by volume will always be the same; 2, if they unite to form a variety of compounds, these proportions will always be multiples of the lowest combining volumes. 3. The third law is most curious of all; that the combining volume of a gaseous compound is always 2. For example, if two elements represented by x and y unite in proportion of one volume of x to one of y, there would be formed two volumes of the compound. If there should be two volumes of x and one of y there would be two volumes of the compound, and if they should unite three volumes of x and one of y, again there would be but two volumes of the product. Just why two should be such a favorite number is difficult to explain. No one can carefully study these interesting laws without perceiving the necessity for a rare intelligence in arranging all materials with such mathematical exactness.

How absurd to ascribe to atoms the power to count, to weigh, to measure, to arrange themselves in orderly combinations which surpass the most skilful marshaling of battalions on a great battle field. It would be to make gods of atoms.

AN ALLEGORY—THE FOUR KINGS.

Once upon a time, as the story goes, the King of the Acids, whose name is Sulphuric, arrogantly walked forth to view his wide domain. He was sour and fierce. Many conquests had made him boastful, until he thought himself the mightiest of the earth. Soon he came to where the King of the Metals whose name is Gold, sat in royal state, his countenance shining with



AMMONIA GAS AND CHLOROHYDRIC GAS MEETING IN THE AIR AND FORMING AMMONIC CHLORIDE.

EXPERIMENT.—Place some ammonia in one glass and chlorohydric acid in the other. Ammonia gas (NH_3) and chlorohydric gas (HCl) will meet in the air and form ammonic chloride (NH_4Cl).

wonderful beauty. The haughty monarch of the Acids was angered as he approached, to see that his rival did not recognize him, nor acknowledge his power. "I am mightier than thou!" he said, but King Gold smiled in silent derision. Thereupon the former fiercely attacked him, but was easily repulsed. The savage aggressor, insane with rage, went away muttering, "I have two sons who can slay thee!" He instantly commanded Nitric Acid and Hydrochloric at once to unite in an attack upon his opponent. Their father gave them a banner on which was inscribed "Aqua Regia," which might be translated "King Slayer." It was indeed too true a symbol. Alas! before their combined onslaught the royal metal

yielded. The old king now grew more arrogant than ever, and boastfully announced that his sway knew no limits. One day he discovered, in his walk, one of a smooth and gentle countenance, yet with an expression indicating that if aroused he might make biting and caustic replies. It was Potassa, King of the Alkalies. From hot words, they soon passed to blows, until in the wild struggle both were slain. Horrible to contemplate, they ate each other! The spot on which they perished can still be pointed out. This story is a warning to vaulting ambition, and a tragedy surpassed in pathos only by the mournful story of the Kilkenny cats!

CARBONIC ANHYDRIDE, CO_2 .

This substance is also called carbonic di-oxide and carbonic acid gas. It is the dreaded "choke-damp" of the miner. It is produced when carbon unites with O, whether by the decay of vegetation, combustion of vegetable matter, or the oxidation of the blood. It is so heavy that it may be poured or dipped out from vessel to vessel, like water. It extinguishes flame, and is largely employed for that purpose in contrivances like the Babcock Fire Extinguisher,⁴ and the more recent Fire Grenade.⁵ Taken into the stomach in the form of soda water it is refreshing and beneficial, but its inhalation is always injurious, and will produce death if breathed in considerable quantity, by causing asphyxia.⁶ A practical problem of great importance is that of ventilation, as this material is constantly being thrown off from the lungs, of both animals and men. In the days of ample fire-places, our homes, if they had less heat had purer air. The railroad car, in point of comfort, is a marvelous improvement over the ancient stage coach, but the latter was better in the matter of ventilation. The sleepiness of congregations should be attributed as much to the foul air as to the dull preaching. Can not some of our writers on homiletics prepare us a stirring chapter on the relation of carbonic acid to eloquence?

Homes, school houses, and all public buildings should be supplied in some way with a gentle and universal circulation of air. Fierce draughts should by all means be avoided. Ventilation is now generally best secured by the construction of flues in the wall, which have openings in the lower and

upper portion of the room. The world yet waits to bless the inventor of a simple and effective system of ventilation which is of universal application.

OTHER ATMOSPHERES.

As has been suggested, there must be in the air a variable quantity of other substances beside those named as forming its mass. Ammonia gas (NH_3) is present, and it is from this material that most of the nitrogen found in plants is obtained. Water readily absorbs it and conveys it to the roots. Other elements require only additional heat to volatilize them. Almost all of the elements of nature have been liquefied; carbonic acid has been solidified, forming a beautiful white solid, intensely cold. It is generally accepted as a truth that all substances could be solidified by the sufficient removal of heat, and it would of course follow that they could all be vaporized by applying heat enough. In earlier geologic times many of the materials forming our earth must have existed as vapor in the heated atmosphere, and the time will come when our globe will have no atmosphere, no seas, lakes, nor rivers. It will float in space, cold and desolate like the moon.

The opposite of this condition can be seen to-day in many of the heaven'y bodies. The spectroscope reveals in the sun's atmosphere gold, iron, copper, zinc, and many other substances. Vast disturbances are constantly heaving and tossing these materials, which are intensely heated. The cyclonic movements are so violent and extensive that the wildest hurricanes of our earth would seem as zephyrs in comparison.

Hydrogen flames have flared out one hundred thousand miles from its surface. It has been suggested that the mighty fires in the sun may be fed by millions of meteoric bodies which are tossed into its raging heats by the power of gravity. Nothing could withstand such terrible combustion. Lockyer says that if all of the sun's heat were concentrated upon a mass of ice as large as the earth it would melt it in two minutes, and convert it into vapor in fifteen.

Science has accomplished few things more wonderful than that of crossing over the vast spaces of the universe, and revealing to us the chemical composition of the celestial atmospheres.

End of Required Reading for December.

THE LAUREATE POETS.

BY REV. A. E. WINSHIP.

CHAPTER II.

Samuel Daniel, Spenser's successor as laureate, is unknown to the general reader, though by the reader of his time he was well considered, and literary critics of every age have admired him. He had no superior in the correct, classic use of English. Lowell says that in two hundred years not a dozen of his words or turns of phrase have become obsolete, a thing that can not be said, probably, of any other English writer. He failed not in rhythmic skill, or linguistic art, but in that element which marks the literary genius' power to speak to his neighbors in such a way as to speak to all times and climes. Shakspeare's words are as much at home in one nation or century as another. Bunyan had a similar skill, so had Burns, but Daniel had it not. In comparing him with men of permanent literary fame we see the superiority of processes to facts, of methods to transient results.

Daniel's lines are so exquisite that in every age the great poets have not only been his admirers, but have made systematic effort to revivify his lines. In the time of Hazlitt, he secured the co-operation of Lamb and Coleridge, and the three combined their talent and friends to resurrect his fame by

placing beneath his poems their own genius and reputation, but they could not call his verses from the oblivion in which they had been decently interred.

This incident is a capital answer to the charge that great men, notably literary men, depend upon circumstances for their fame. Nothing can buoy up fame but the filling of the veins with a personality through genius. At some stages circumstances aid, friends are serviceable, but it is the inherent qualities that survive in the tempestuous waves of public opinion and criticism. Daniel won the title of voluntary laureate by serving from Spenser to Ben Jonson without stated financial reward, though he was benefited financially and otherwise. Samuel Daniel was born 1562, near Taunton. His father was a music teacher, and the son studied at Oxford, but did not take his degree. He published poems at twenty-three. He was tutor to Lady Anne Clifford, afterward Countess of Pembroke, and became historian and poet under Earl of Pembroke's patronage. His admiration for the Italian verse influenced his original stanzas, and led him to devote much time to translations. His most extensive work was the poetic history of the civil wars between the houses of Lancaster and York.

Ben Jonson, who succeeded Daniel, is a curiosity in literature. Physically, mentally, morally, he was unquestionably the most unique character among English "Men of Letters." In build heavy and uncouth, face broad and long, with square jaw and large cheeks, disfigured by scurvy, with a "mountain bellie and ungracious gait." He was the son of a clergyman who died before he was born. His mother married shortly after for her second husband a bricklayer, whom the child royally disliked. The coarsely framed, energetic lad was, in the eyes of the step-father, only fitted for manual labor, and consequently he was taken from school as soon as he could handle a trowel, and placed at brick laying. In this action two elements in the boy's nature were overlooked; combativeness and pride; and it was not long after this summary parental authority assigned him menial employment that the impetuous lad unceremoniously withdrew from home associations to parts unknown. The army was his retreat, and he was not long in making a record for personal bravery by meeting a man in single combat, at the age of seventeen, in the presence of both armies, Spanish and English, killing his opponent single handed.

At the age of eighteen he retired from the army, and for a brief period resumed his studies, from which he early retreated and sought a livelihood with his pen at drama writing, and to assure their success and increase his income he attempted to act them in the theater, but pride and combativeness led to a violent quarrel with an associate actor, and in the duel which followed he killed his opponent with the sword. Arrest and imprisonment followed, and execution was inevitable but for the gracious interference of a priest, whose interposition secured his release before the sentence was passed upon him.

When at twenty years of age he came out of prison his hands were stained with the blood of two fellow-beings; his first act was to secure himself a wife, though he had not a penny in the world, and no visible means of support. This apparently rash act was the wisest movement of his life, as it necessitated a vigorous wrestling with poverty for four stern years, which balanced his temper and disposition and intensified his mental powers. During these years of galling poverty he produced under its stimulus the greatest work of his life, "Every man in his Humor." His works all show learning of the highest order. Hume said that he had the learning Shakspere lacked, but lacked his genius. But when and how did he acquire it? Largely by unparalleled reading in these four years when his poverty goaded him to acquire the skill to earn money with his pen.

He was a scathing critic, lashing play writers, actors and theater-goers with unmerciful sarcasm in the prefaces of his plays, until he became the best hated man in England, actors frequently denouncing him in unmeasured censure before their audiences, which only goaded him to the public declaration that he had no fear of "strumpet's drugs or ruffian's stab."

When James VI. of Scotland ascended the throne as James I. of England, there appeared a comedy styled, "E'stward Hoe," written by Jonson's most intimate friends, Marston and Chapman. The work reflected sarcastically upon certain Scotch traits, exasperating the newly crowned king so greatly that he caused the joint authors to be thrown into prison, and it was currently reported that they were to lose their noses and ears.

When Jonson, who was in high favor with the court and people, heard this report he was exasperated, as he had written certain passages of the book for them, and he promptly surrendered himself as a fellow-author, and took his place defiantly in prison, which placed the king in a most uncomfortable position, as he had neither the desire nor the courage to mutilate the face of the most popular writer of the day. The three were in consequence released, and Jonson gave a great feast in honor of the event, at which his mother displayed a phial of violent poison, saying that had he been mutilated she would

first have drank from the deadly phial and then have given him to drink. He was universally recognized as one of the most jovial characters of the day, and spent much of his time with literary companions at the "Mermaid Club," a socio-literary association of brilliant men, among whom were Shakspere, Beaumont, and Fletcher.

When he was appointed laureate he was granted at first a hundred marks, or about sixty-five pounds, which was soon advanced to a hundred pounds, which with his literary income would have sufficed had he the gift of using money wisely, which he had not, and as life advanced he was continually annoyed from want of funds. Then it was that his sarcastic habits of speech bore fruit. When young and vigorous he rejoiced in his enemies, but as he aged his skill to make enemies increased, while his youthful powers to ward off their thrusts was waning. The time came, as it must always come to men in years, when he had nothing new to say, no vitality for originating thought, or freshly stating truth, and unfortunately he was forced to attempt to write for living, and writing poorly, his enemies attacked him savagely, setting his words before the public in absurd relations, saddening the closing years of life. Misfortunes never come singly, and his mental chagrin was augmented by the humiliation of being a paralytic to such an extent that he could not walk, and dropsy and scurvy intensified his suffering. His wife and children had died and his only servant and companion was an uncomfortable old woman. The king withdrew his royal patronage, and he lived at last only by soliciting favors from his friends. In Westminster Abbey, where his remains lie among the famous poets, is a plain, square block of stone, marking the resting place of this erratic youth, brilliant man, suffering and neglected senior, with this inscription:

"O RARE BEN JONSON."

No poet laureate adorned the royal household for a quarter of a century. Some time before the death of Jonson, Charles I. had fallen on troublesome times. The poetry of life in court circles was gone, and even the prose was shorn of its beauty.

It is a strange chapter that recounts the way in which the Romish church, as well as the English, lost all power in the nation; the way in which the Presbyterian church, so long an outlaw, came into power with all the vigor of youth, and almost instantly went out of power in a panic; the way the ever-to-be-feared Independent, who never knows law or reason, came to haunt the dreams of the nobility.

The king was weak, timid, vacillating; the nobility came to be of no account to anybody; the House of Commons that prided itself on being radical, suddenly found itself so conservative as to be frightened even from its parliamentary place of rendezvous, and became an insignificant factor in the government. What a day was that in which neither the Romish, English, or Presbyterian church was of sufficient account to be consulted, when the king was a cipher, the nobility a minus quantity, the House of Commons an unknown factor, and two men, Hampden and Cromwell, rallied fifty Independents, constituted themselves a law unto themselves, organizing what has been known in history as the Rump Parliament, and beheaded Charles I.

In Jonson's day the king saw the drift of affairs, felt the throne trembling beneath him, and had neither the funds to continue Jonson's pension, nor was he in the sentimental mood to appoint a successor upon his death. It would have been cruel mockery indeed for any poet to rhyme his praise.

The ten years in which Cromwell rode rough shod over every established order of things did not develop a spirit that called for poetry. Life was too hazardous to incline any to sing in joyous strain. But when he died and no Independent rose to fill his place, Charles II. was called to the throne, and the House of Stuart once more held the reigns of government securely, and the citizens called for a knightly laureate.

Sir William Davenant assumed the position of versifier for

the king. He was the son of a wealthy vinter who kept the Crown Inn at Oxford, where Shakspere always stopped, who, by the way, was such an ardent admirer of Mrs. D'Avenaunt that her son bore his name, and it was the quiet boast of Sir William that he was the natural son of the great dramatist.

He was early attached to the household of the gorgeous Duchess of Richmond as a page, and later attached himself to the retinue of Lord Brooke, until that nobleman was murdered, which affliction threw Davenant upon his own resources, which induced him to try his hand at versifying, but without success until one of those periodic freaks of Ben Jonson led the great poet to quarrel with the court architect, who in the emergency discovered Davenant and gave him the opportunity to secure the position on limited literary capital.

There was that in his nature which made him an active partisan, and during the Long Parliament he was imprisoned for scheming to seduce the army and overthrow the Commons. He escaped, was captured and reimprisoned, escaped the second time and fled to France, where he joined the exile queen and served the cause of royalty by smuggling military stores into England, and for personal bravery in the army of the Earl of Newcastle, who espoused the queen's cause, he was knighted. After the fatal battle of Naseby he returned to France and assumed the management of the colonization society and sailed for Virginia, but his vessel was captured by a parliamentary man-of-war and he imprisoned on the Isle of Wight, and afterward sent to the Tower on the charge of high

treason. The timely interference of his old poet friend, Milton, who had espoused the Puritan cause, alone prevented his being beheaded. This successful importunity of an old friend was in many ways most gratifying to Davenant, who, a few years later, when Charles II. was called to assume the reins of government and executed vengeance on all old time enemies, dooming Milton to sudden execution, was privileged to reciprocate the favor, and by timely intercession, recounting the service the poet had been to him, saved Milton from the fatal consequences of his political affiliations.

After Milton secured Davenant's release from imprisonment the humbled courtier endeavored to win an honorable living as a poet, but in vain. He could only write dramas, but the Puritans had closed the theaters with a rigor that knew no exception. It was in this emergency that the knight whose experiences had been so varied did the one bright thing of his life: he succeeded in writing inoffensive plays, and having them acted by calling them *operas*, thus pacifying the ruling public, at the same time giving the world a new name for a diluted drama.

Charles II. when in power rewarded the faithfulness and loyalty of Davenant by crowning him laureate. It has been truthfully but cruelly said that there is not a more hopelessly faded laurel on the slopes of the English Parnassus than that which once flourished around Davenant's grotesque head. Of the brighter man who followed him another chapter must account.

[TO BE CONTINUED.]

THE SPELL OF THE HALCYON.

BY MARY N. EVANS.

In the midst of drear December,
With a strange and magic art,
Comes a gentle, mystic presence,
Melting stern old Winter's heart;
Then the sullen sky, whose frowning
Chilled our hearts for weeks before,
Sudden smiles—and lo, above us,
Heaven's bending blue once more!

Then the sunshine softly falleth,
Flooding earth with golden rays,
And the bleak fields stand transfigured
Through the brief, bright, "halcyon days;"
While the storm-scoured, wrathful billows,
Surging home with angry roar,
Stretch, a shining sea of silver,
Toward an unseen, sunny shore.

Do you ask me whence the magic,
Thus transforming Nature's face?
Listen to the quaint old legend
Grecia wove with matchless grace;—
How true-hearted Alcyone
Plunged despairing, 'neath the wave,
Her loved husband, Ceyx, joining,
In his lonely ocean grave.

Then all hail to Love immortal,
Hail! thou blessed heaven-born Dove!
Brood o'er all life's troubled waters,
Till the earth is filled with love;
Comfort every grief-bowed mourner—
Bid all wars and tumults cease,
Till the world with glad hosannas,
Usher in the Prince of Peace!

Father Neptune, late relenting,
When he saw their deathless love,
Changed them both to tiny birdies,
Skimming light, his waves above;
Then he bade them on his bosom
Build in peace their glad home-nest,
Hushing every wild storm-spirit,
For that season into rest.

Naught can harm the tiny nestlings—
Naught disturb the parents small,
For the spell of love undying
Softly broodeth over all!
Thus the heart of old December,
Throbbing fierce with rage malign,
Groweth warm, and sweet, and tender,
'Neath a sense of love divine.

So the home-love of the birdies
Reacheth far beyond their ken,
Crowning all the earth with blessing—
Bringing peace to weary men;
Even so from happy hearth-fires,
From each heart where love is king,
Goeth forth an influence holy,
Earth's millennial dawn to bring!

CHRISTMAS DANGERS AND CHRISTMAS HINTS.

BY HELEN CAMPBELL.

Not that involved in the old saying, "A green Yule makes a fat churchyard," nor even a hint at what Christmas cramming for both children and their elders may include. The physical results of either case are but a small portion of the evil that year by year has grown, so silently, so unsuspected, that to name evil in connection with the day seems both a misnomer and an outrage.

Is it climate or temperament, or simple inherited tendency that makes a golden mean impossible to the average American? A combination probably, combinations being the one thing to be taken for granted in any analysis of causes in man or nature. Life for Americans began in a reaction. Form and ceremony had hampered thought and hindered growth, and the earnest Puritan swept both aside once for all. A comfortable certainty was his that the question had but one side. His doxy was the only orthodoxy, and his doxy rejected Christmas as popish and owning the mark of the scarlet woman. We all know the joylessness, the somberness of those early days, in which human struggle was the only aim; never human delight or human pleasure in anything God had made. And we know as well, beyond any need of outline here, the sharp reaction from such numbing relief, and the conviction coming more and more surely to the surface, that enjoyment is as much our destiny as struggle, and that strength for the one comes in full acceptance of all legitimate forms of the other. But when enjoyment becomes a struggle, and we find distracted men and exhausted women crying as the holidays end, "Thank fortune Christmas is over with!" it seems high time to inquire why the friend whose entrance was hailed with acclamation suddenly appears in the character of the old man of the sea.

Is it that this is true, or that we have made him such by our own election, refusing him his rightful place, and forcing him ourselves to the shoulders that need have borne no such burden? We stagger under the responsibilities of this time that should mean only the purest pleasure. We grow feverish and anxious in paying a debt when free will offering alone has any part in the real Christmas. Children count their presents and are sad or sulky if tree or stocking hold one less than those of the child across the way. Boys and girls value the gift for the money it cost, and have learned such valuation from fathers and mothers who have discussed their own gifts from this standpoint. The spirit of bargaining possesses all; to get the most for the least outlay; to make the sum expended bring the utmost possible show. The counters are piled with flaunting bric-a-brac—cheap imitation of articles beyond the purse of the average buyer, and the woman whose supply of dish-towels is renewed from old sheets and who has not dared to buy book or photograph for a year, gives and receives some senseless plaque or staring vase, and might even resent a dozen dish-towels as quite out of harmony with the spirit of Christmas. The children share the same feeling, and if they make anything with their own hands, seek something so flimsy and useless, that as quickly as may be it is quietly tucked out of sight. And even where common sense has larger play, the amount of what must be done has gained such proportions that feverish hurry fills the days of preparation, and utter exhaustion the days that follow.

"I don't think much of Christmas," a small and cynical boy remarked not long ago. "It's just a regular grab game, that's what it is. I know fellows that join three or four Sunday-schools just for what they'll get on the tree; and I know one

fellow that hired other fellows, because you see, he couldn't be everywhere at once, and when his name was called off they just went up and got his things for him. What do you think of that?"

"I think it's pretty bad, but that isn't the sort of Christmas you have at home, Horace?"

"Yes, it is. Ours is just the same, only not so many of us. Gussie is mad if I don't spend a lot, and says I'm mean, and mamma says so too if papa's present doesn't suit her. I'm sick of it. Why didn't you give me anything last Christmas? You always did before."

The answer would make an article of itself, for as I listened my soul burned within me, and when the child ended, with his calculating little face turned up to mine, I spake with my tongue, and in the end brought a new look into the grave, blue eyes. To him as to too many of us, it had come to be the gift and not the giver, the symbol, and not the fact behind it. This is a one-sided presentation you will say, an arraignment undeserved by many; and even if deserved, the saying which does duty in so many directions, once more comes up: "What are you going to do about it?"

What we must all do, if the day is not to be permanently despoiled of all real significance and beauty, is at once to settle absolutely into simpler lines. The same passive acceptance of custom, that has doubled our work in all home directions and made the multiplication of labor-saving machinery merely a reason for an always increasing ratio of labor, operates here also. A sensible writer in the *Christian Union* not long ago remarked that in the days of our grandmothers it was ten children to one ruffle, whereas now it was ten ruffles to one child. So it has been with gifts, and the child of the last generation who rejoiced in two or three, considers the child of this defrauded with less than a dozen. Cheap toys, soon destroyed; cheap books, cleaving from their binding in a week; cheap candy, fair to see but slow poison to the eater—fill the stockings and crowd the tree, when the same money would have secured one well-made, perfect gift, worth the keeping for a lifetime. Art in its new adaptations is beginning to teach us the value of honest work, yet with an education which has known flimsiness and tawdriness as the chief characteristic of a child's possessions, how hard is the transition to simplicity and strength. That we have made such strides away from old conditions is only another proof of the enormous recuperative power, part of the birthright of every American, who, born, it may be, in a log cabin, ends his days as an authorized and accepted art critic. It is safe then to believe that the mass of common sense people need only to consider the bearings of the Christmas craze in its present workings to decide that a change must come, and to take active measures toward such change.

Necessarily, only women can bring about such change, for it is on them that the chief burden of Christmas work has fallen and will continue to fall. For each woman there must be a pause and a well-considered determination as to both amount and degree of effort and expenditure. Where there is little money personal effort is the only substitute.

The numberless fashion magazines are filled at this season with hints for Christmas gifts, some practical and helpful, but more quite useless to limited purses. A few suggestions as to home-made gifts are given here, the reader's own fancy and memory being trusted to fill out the list, which must necessarily be a limited one.

A most useful present is a sofa pillow, covered with one of those large, bright silk handkerchiefs which are found in gentlemen's furnishing stores. It may be of cardinal, old gold, blue or olive green, to match the furniture, and must have a darker border. If the corners are plain, a figure of a dog's head, an owl, or a spray may be outlined in one, with silk of some contrasting hue. Stretch the handkerchief smoothly over the silesia-covered pillow made of a suitable size, turn the ornamented corner back and fasten around its edge, and fit a piece of black velvet neatly in its place. The edge is finished with a silk cord of the same color, and a bow to match is placed on the velvet. The whole can be made in a day, and is both effective and inexpensive. Pine needles or hops may be used for filling the pillow, which may thus be more welcome to an invalid friend.

In place of the handkerchief, some tastes might prefer the crazy patch-work now so much in vogue. If so, the pieces must be very small, and most of them of vivid colors. They will bear any amount of embroidery in quaint designs; flowers, fans and oddities, all on a small scale. Seams are joined with feather-stitching in shaded silk.

As a companion-piece, a head rest goes very nicely. A strip of wool in any desired color may be crocheted in the Afghan stitch, and then dotted irregularly with the conventional palm-leaf, in shaded silk, worked in cross-stitch. If made of linen, the word "Rest" may be outlined in fancy letters—first traced with a pencil—in crewel. A poppy with its leaves falling apart, in place of a period after the word, is suggestive and pretty.

For a literary friend, or to stand by papa's desk, a waste paper basket may be made in a variety of ways. A lard pail of large size may be covered with plush and lined with silk over pasteboard, fitted separately to the sides and to the circular bottom. If of olive tint, conceal the joining at the top by narrow gilt lace, old gold cord or ribbon ruching, often decorating one side with a spray of large crimson and buff roses, hollyhock blossoms, daisies or sunflowers. These may be procured in applique at any fancy store for a half dollar to three times that sum. It is much preferable, of course, to embroider any fanciful pattern, or to paint a running vine, beginning near the bottom and ending at the top after having encircled the pail. Allowance in decoration must be made for two hoops of old gold satin ribbon, one and a half inches wide, tied in snug bows. Sunflowers are sometimes made with dark brown French knots of silk for the center, and petals of narrow yellow ribbon of several shades. These, cut a proper length, are turned in and fastened with invisible stitches to the plush, making an excellent similitude of this showy flower. These blossoms admit of great skill in arranging and grouping.

The new-fashioned paper water pails are also used as waste paper baskets, and are desirable on account of their lightness and durability. Even a novice can decorate them most effectively. Paint entire surface with dark shaded yellows and browns, or pink deepening to crimson, and when dry trace on this background a conventional trailing vine and a few loose flowers, or red Christmas berries like the holly. They may be copied from any pattern which strikes the fancy, color being desired rather than minuteness of finish. The handle, if not removed, must be wound with ribbon.

Presents of catch-alls or receptacles for the sewing room can be similarly fashioned. A new way is as follows: Take a crimson or parti-colored Japanese fan, remove the rivet holding the sticks together and run a stout cord in its place; the fan is then to be fastened over a pasteboard funnel of just the right size and lined with solid colored paper of some pleasing tint. Ribbon to match, an inch wide, must be woven in and out the sticks close enough to cover the pasteboard, and just above the bottom, in front, secure a drooping bow of two-inch satin ribbon. A few dried oats and grass stitched into the bow, making a tiny bouquet, take off the stiffness of the ornament.

Another receptacle for letters or manuscripts can be made from a couple of plain palm-leaf fans. Cut off the handles even with the edge of the fan and cover one side of each with silk, fastened to the top and sides, and pleated or gathered at the handle. They are lined with silesia, and sewed together at the tips. The tops—where the handles were—are flared apart for a distance of six or eight inches, and then are to be joined two-thirds of the way from the bottom by bright-hued taffeta ribbons, narrow enough to cross easily in small diamonds. Finish with a cockade of the same ribbon where the silk is pleated at the handles. Or the ribbon may be quilled in a V-shaped way down the middle far enough to give the receptacle a heart-shape. A smaller heart of velvet, crossed with a straw-colored arrow in embroidery silk, is a pretty finish for the left-hand corner, with a spray crossing diagonally behind and above. This may be varied by having a diagonal piece of velvet cross the front, or a band of the same near one side, on which is painted, embroidered or appliquéd any favorite design. The colors and arrangement admit of the greatest latitude, and challenge the fancy of the worker.

But this is not the beginning of what may be made of fans, for fanciful or useful presents. Here is a pretty design for a wall pocket: Attach one, nearly open, to a piece of pasteboard not quite its size; from another remove the rivet, insert a cord in its place and tie tightly. Line with paper and thin silk outside of that, and fasten the edges by invisible stitches to that attached to the pasteboard, allowing it to curve outwardly sufficiently to answer the purposes of a receptacle. Finish with a bow.

A series of a dozen bright paper covered bamboo fans, arranged to overlap each other, light up the dark corner of a room on Christmas day, with a play of color of which the eye never tires. These, or the ribbed fans, may be arranged with their handles grouped together and fans diverging from the corner of the ceiling on the sides and top, making an ornament both brilliant and unique. In the same manner they may be employed about the center-piece of a plain ceiling, or in devices on the side walls from which to hang Christmas banners, wreaths or mottoes. On a long side wall small fans may be so grouped as to simulate an eagle, from the talons of which depends a favorite motto.

In dressing a room for Christmas it is important to have all the accessories bright and harmonious. If all the decorations are Japanese, there are a thousand ways of using paper mats, screens and pictures which will suggest themselves with a little experimenting, and these are now everywhere easy to obtain. The entire ceiling may be bordered with a frieze made from a couple of Japanese picture books, which are merely folded pictures several yards in length, when stretched like a panorama. A dollar's worth of books will thus impart a brilliancy which nothing else emulates, while the pendant Christmas greens seem the richer by contrast. A few large Chinese lanterns hung from the ceiling, wreathed with simple vines, like princess pine, about the bottom, in addition, will convert the plainest room into a kind of bower, peculiarly fitting it for the festivities of the season. The uttermost parts of the earth must yield up a tithe of all their glory, to aid in illuminating the natal day of the Prince of Peace.

For all parts of the dwelling, a thousand dainty devices are easily made, suitable for presentation on that day. For the dressing bureau, butcher's cuffs of plaited grass are coarsely embroidered in crewel, with design of rushes, grass, daisies or poppies, springing from the bottom, which is filled in with a circular piece of pasteboard covered with linen. Line with crimson cloth. Scent bottles may be covered with painted ribbon bags, or merely tied with satin ribbon, the ends of which have each the favorite flower of the recipient, or a flower on one and an initial on the other.

For the whisk-brush at the side of the bureau make a tight, straight cover of crash or linen, embroidered or painted, edged

with scallops bound with silk. This is drawn close about the handle and tied with a narrow ribbon at the top, and is long enough to come within two inches of the tip. Such a cover will prove far more acceptable than the brush-holder which has been so much used.

For splasher take fine, stiff linen, fitted to the space above the washstand, and hemmed at the ends and sides. Trace lightly with a lead pencil, lengthwise, any suitable pattern. It may be made of irregular, horizontal lines, for water, on which are outlined a duck floating or diving; large water lilies with their graceful leaves and rushes at the edge. Then dissolve India ink in a shallow dish of water, and with a new steel pen go over the outline carefully, repeating where the shade deepens till it is sufficiently heavy. The etching may be made very handsome and striking with a little care; or, a conventional morning-glory vine may obliquely cross the splasher. It is fastened to the wall with minute tacks and a bow at the left-hand upper corner.

Do we wish a table-scarf for a friend? It can be made of felt, of one of the many shades of olive, on which decorations are so well brought out. Line with silesia, and border the ends with a broad band of plush. Finish with outline stitch of contrasting colors, or with transfer-work of fine crotone or appliqué flowers, made of machine embroidery, to which reference has been made. It is not generally known that felt may be hand-painted in oil with a stiff brush, by the merest novice. Have a large figured embroidery pattern stamped on the felt to give a strong outline. Mix the colors thick and put on with a bold touch. Large flowers or fruit, like blackberries, are showy and effective here and resemble the softest crewel-work at a little distance.

If the square covers are preferred, those hiding the entire table, they are fringed by simply cutting the edges in strips a quarter of an inch wide and six inches deep. Another fringe made precisely the same way, of old gold felt with a narrow heading, is merely tacked under the first, when the hue is olive or wine color. Canton flannel table spreads can be finished and decorated in a similar manner.

Mantel and window lambrequins are made according to the same general plan, of felt, canton flannel, plush, or linen. If the latter, they are embroidered with long stitches in patterns of grass or sedge, daisies or crimson berries, or painted in trailing figures of wild roses.

For a gentleman an umbrella case is always an acceptable present. From a yard of strong, twilled linen, measure a lengthwise strip ten inches wide at the top; taper it on each side to six inches wide at the bottom. On this strip fit another piece of the same linen, shorter and fuller, to give room for two umbrellas. About the right size will make it three-quarters of a yard long, fourteen inches wide at the top, and eight inches at the bottom. Crease the latter lengthwise down the middle; on one side of this crease, outline in black silk the shape of a closed umbrella, ribs, handle and folds, and on the other a smaller sun umbrella. On the upper section of the foundation copy in the same manner figures taken from the Greenaway books. A pleasing device is a couple of children, merrily trudging along in the rain, each under an open umbrella. Then stitch the center of the embroidered strip to the center of the foundation, after laying two pleats in the tip of the shorter and wider strip, so as to make them of the same width. Run the sides and bottoms together, after lining the foundation, and bind the whole with black braid. Attach two strong loops to the top to suspend from hooks.

For the little ones naught can come amiss. Stockings of coarse white lace, with slipper tips of blue or pink, and a dainty knot of ribbon in front; all sorts of fancy ornaments made of stiff paper and covered with gold and silver paper; cornucopias, boxes and toys without end—their variety and name are legion. A pretty bon-bon receptacle is made in this way: Take a square of silk measuring from eighteen to

twenty-seven inches, of any color desired—a bright handkerchief will do—and mark within it a perfect circle small enough to be three inches from the middle of the sides. Make a shirr at this mark, in which draw two ribbons in such a manner as to pull together like a work-bag. Trim the edge with black or white lace, and you have a beautiful bag, after the bon-bons are gone. If you choose to give a unique finish it is easily done. Soak your own photograph in water long enough to remove the picture from the back; dry carefully, and gum to one corner.

So much for gifts and home decorations, the list of which might be indefinitely extended. The Christmas dinner is always a matter of study—to the young housekeeper sometimes despair. Let it be remembered that on that day everyone from the children to the grandmother has nibbled at candies and nuts, and all tempting Christmas sweets, and that, even if the richest of mince pies and plum puddings seem none too good for the occasion, a simpler dessert of delicate blanc-manges or jellies will leave the eater a clearer head than the heavier mixtures. Two menus are given, one under protest and elaborate enough for the most persistent believer in many courses; the other far simpler, and quite possible for even the young housekeeper, who is ambitious to show what she can do. So many admirable cook-books are now before the public that it seems invidious to mention any special one. But the writer, who some years ago had occasion to examine carefully one hundred and forty-three, finds that where many have done excellently, one recent one embodies most perfectly their best features. It is the Boston Cooking School and its director, Mrs. Lincoln, to whom we owe this most admirably planned book, in which every receipt has been personally tested. Mrs. Ewing may be depended upon also as an authority, and there is a compact little manual known as "The Easiest Way in Housekeeping and Cooking," which has brought to its author scores of letters from the housekeepers who have found it a friend. In any of these books accurate rules will be found for the dishes given in both menus.

I.

Oysters on Half-shell.

Amber Soup.

Roast Turkey, Made Gravy.

Boiled Tongue, Sauce Piquante.

Sweet Potatoes; White Potato Mashed.

Macaroni, with Cheese.

Cranberry Sauce.

Celery Salad and Wafers.

Mince Pie, Plum Pudding, with Cream Sauce, Lemon Jelly, Fruit, Nuts, Raisins, Ices, Black Coffee.

II.

Oyster Soup.

Roast Turkey, Made Gravy.

Mashed Potato; Sweet Potato; Squash.

Macaroni, with Cheese.

Cranberry Sauce; Celery.

Plum Pudding, Cream Sauce.

Fruit, Nuts and Raisins.

Black Coffee.

For a family where the mistress must do all with her own hands, omit the soup and at least one vegetable in the second menu. It would be wisdom also to substitute for the rich pudding a mould of blanc-mange or lemon jelly, but these are matters of personal decision.

The home dinner decided upon, every woman will remember the poorer homes where festivity can never be possible, save as the means for it come from others. It is easy to find ways of adding some unaccustomed luxury—a little fruit, some nuts and raisins, or perhaps even the turkey itself to the table of some hard-working, self-respecting head of a family, who finds the dollars always too few, yet asks favors of no man.

Often a little coöperation would secure a good Christmas dinner to many who alone would be unable to buy it. By settling upon how much can be spent, and giving the sum to some authorized buyer, wholesale prices may often be had. To accomplish this for half a dozen poor families in a given neighborhood, would often be truer charity than any giving, and pave the way to coöperation in other ways. On no other day of the three hundred and sixty-five can we answer as readily to the question, "Who is my neighbor?" as on this one sacred to love, both human and divine, and demanding love as its highest expression. There may be no time for any elaborate church service, to which a morning must be given, but even if not morning should hold some assembling together, and in a neighborhood where many poor, or workers in factories or mills are to be found, a simple entertainment—play, charade, light concert, or stereopticon might well have its opening word, thoughtful and tender, of the Christ-child; his love for every weary and toiling child of earth, and his joy in their joy. Where there is no such population there is no less need

of a general as well as a special assembling. In short, by judicious planning, it will be possible not only to cover all necessary ground of home pleasure in the day, but to make part also of such evening entertainment as may seem good. A church dinner has been given, made up of prepared food sent in by various members, all that remained being taken home by the eaters. Each year has had its suggestions for Christmas pleasure for the poor always with us, and at such a season denominational differences slip out of sight, and counsel can satisfactorily be taken together by the working members of all churches. Union festivals have already proved successful, and may be perfected still more in detail, the warmth of this joint action for a common good lasting long beyond the day of its accomplishment. If the day has its dangers it holds also its delights, and may be more and more the occasion for the sweetest and tenderest thought and labor that we have to give—a never-failing spring of pleasure to every soul who knows its real meaning and works toward a fulfillment of that meaning.

DO ANIMALS FEIGN DEATH?

BY M. ROMANES.

Translated for THE CHAUTAUQUAN from the *Revue Scientifique*.

It is a well known fact that animals belonging to different orders and even to different classes, manifest, when they are in danger, the instinct of feigning death. As it is evidently impossible to attribute this to any idea of death, and a conscious simulation of it on the part of the animals, the subject acquires importance, and merits our consideration. I will cite briefly some facts I have been able to gather, and will then attempt some explanation.

The most familiar examples of the instinct in question are furnished by various sorts of insects and spiders, many of which will allow themselves to be torn limb from limb, or to be burned until death follows, without making the least movement. "Among fishes the captured sturgeon often remains motionless and passive in the net, while the perch seems to be dead and floats upon its back." Wrangle tells us that the wild geese of Liberia, if they are disturbed during their moulting season, when they are unable to fly, will stretch themselves out upon the ground and appear lifeless, thus deceiving the hunter. According to Couch, the same thing occurs among crakes, larks, and other birds. Of mammals the same author says: "The opossum of North America is so celebrated for its pretense of death that its name has passed into proverb for expressing this kind of deception." He also gives examples of the same fact noticed among mice, squirrels, and weasels, while those told of wolves and foxes are so numerous that I think no one can reasonably doubt their truth. Captain Lyon, in the narration of his expedition to the North Pole, says that a wolf was one day caught in a trap, and, supposing it to be dead, they dragged it on board. After awhile, as it lay stretched out on deck, some one noticed that it moved its eyes every time any object passed near it. They thought best then to take some precautions; its limbs were bound, and they put it in such a position as to leave its head without support. To their great surprise it soon made a vigorous bound toward those who were near by, and then tried to reach back and bite off the rope which held it. There are many examples on record of foxes assuming the appearance of death. Mr. Blyth says: "A fox was once known, when it was surprised in a poultry yard, to lie as if dead; it let them drag it out by the tail and cast it upon a compost heap; but, that done, it sprang to its feet and sped away with all possible haste.

This high degree of simulation and dissimulation has been attributed to the sagacity of the animals, which, when they do

not see any better means of escape, leads them to seem to be incapable of defending themselves, or fleeing, until they have disarmed all suspicions, and thus caused all hostile efforts toward them to cease.

According to Jesse, even serpents will feign death and remain motionless as long as any one is watching them, but when they think their enemies have withdrawn and all danger is passed, they will make a rapid escape. The author of a "Natural History of Birds" relates that at one time a crake was brought by a dog to his master. The gentleman turned it over with his foot as it lay upon the ground, and convinced himself that it was dead. After a time, however, he saw it open one eye; he picked it up, but again it had all the appearance of a dead bird. He put it in his pocket, and after a few minutes he felt it flutter. He examined it a third time, but discovered no signs of life. He then placed it on the ground and withdrew to a little distance in order to watch it. At the end of about five minutes the bird raised its head with precaution, looked around, and then took itself off in the liveliest manner imaginable.

Bingley says: "This stratagem, as it appears, is employed by the common crab, which, when it apprehends danger, remains motionless, waiting an opportunity to bury itself in the sand."

The subject claims serious attention, because, on one side, as has been said above, it is evident that the conscious simulation of death implies the possession of a faculty more elevated than any that we know belonging even to the most intelligent animals; on the other side, it is not easy to explain these facts on any other basis. Couch offers the following: "A very reasonable explanation is, that the suddenness of the encounter with man in an unexpected moment, results in its stupefaction, or throws the animal into such a state that it can not make an effort to flee. The appearance of death is not a ruse with it; it is the consequence of its terror. It is said, if a wolf falls into a ditch the surprise is so great, and deprives him of his powers to such an extent that a man can descend to his side without fear. Also, whenever a wolf loses its way in a strange country, it loses, beside, much of its courage, and can be attacked with impunity."

It is not easy to find a weasel asleep, or not thoroughly on its guard, but what seems least likely of all is that a weasel would allow itself to be rolled over, played with, and tossed

up by a cat. It happened once, however, that while a cat was tranquilly stretched out, a weasel passed by; it was caught in the twinkling of an eye and carried toward the house, situated at quite a little distance away. The door being shut, the cat, deceived by the apparent lifeless condition of its victim, dropped it upon the sill and mewed, as was its custom, for some one to open the door. But at that moment the senses of the alert little creature returned, and it set its teeth into the nose of its enemy. It is probable that, beside itself with surprise at its capture, the manner in which the cat held it by its back had prevented it from making any resistance whatever before that moment; for in catching them up in this manner, our little quadrupeds, that bite so ferociously, can be held without fear of being wounded. But one can scarcely think that the weasel had the intention of deceiving the cat all the time it was in its mouth. This hypothesis would need to be supported by special tests before meriting acceptance.

The tests should consist in permitting the animal, as soon as it feigned death, to regain its liberty, and in watching it without its knowledge. If for any length of time it remained motionless, the fact would support the theory of Couch. Instead of this, if it very soon sprang up and tried to escape it would seem necessary to decide that it voluntarily and consciously assumed that appearance.

I thought once I had found an opportunity for making a test of this question, and perhaps for arriving at some satisfactory explanation of this seeming deception on the part of animals. Having entrapped a squirrel I noticed that it immediately became motionless. I took it out of the trap and placed it on the ground, then concealed myself and watched long enough for it to recover itself; but as it did not stir I went to examine it, and found that it was really dead. This incident supports the hypothesis of Couch, for it shows that terror may be sufficient to cause the death of an animal.

Professor Preyer attributes exclusively to catalepsy this lifeless appearance in insects. Having observed the power of this disease to produce a similar condition in the system of the higher animals, he logically concludes that the same cause must bring about the same effect in all animals. On the other hand, for I do not wish to shun the difficult sides of the question, there are facts going to show that some monkeys feign death deliberately, not to escape from enemies, but to mislead their presumptive victims. Here it becomes necessary to seek some other explanation. Dr. Bryden says that certain monkeys having observed crows gathering around the carcass of a monkey, may have concluded that by becoming motionless they might induce them to come within their reach. Without doubt this presupposes a high degree of intelligence, but it does not imply an abstract idea of death, but rather only the

idea of imitating an object already remarked, with the desire of bringing about a similar result.

Thus, in spite of the probability that this strange action on the part of the higher animals is due to catalepsy, there is a possibility that it may be the result of an intelligent design.

The following incident published by G. Bidie seems rather to substantiate the latter hypothesis.

"Some years ago, when I was living in the western part of Mysore, India, I occupied a house surrounded by several acres of good pasture. The fine turf of this enclosure tempted the cattle, and whenever the gates were open they did not fail to make an entrance. My servants did their best to keep out the intruders; but one day they came to me, deeply troubled, saying that a Brahmin bull which they had struck, had fallen down dead. I will remark in passing that these bulls are sacred and privileged animals which are allowed to roam at will. Upon hearing that the marauder was dead I went immediately to see him; there he lay, stretched out, to all appearances stone dead. Uneasy enough over the circumstance which would be very apt to stir up enemies against me, I returned to the house with the intention of going to acquaint the authorities of the district with the affair; but presently some one came running up and joyously informed me that he was upon his feet quietly browsing in the field. Suffice it to say that he was in the habit of feigning death, which rendered his expulsion practically impossible, every time he found himself in a pasture which pleased him, and from which he did not wish to be turned away. This ruse was repeated several times, and although very amusing at first, we at length grew tired of it. So one day when he was lying as if dead I ordered the coolie to bring a pan of live coals, and placed it near him. At first he paid no attention, but as the heat began to increase, he slowly raised his head, looked sharply at the coals a moment, sprang to his feet, and leaped over the fence with the agility of a stag. That was the last time he honored us with his presence."

The idea of the animal might have been only to resist expulsion by opposing its whole weight to any efforts made in that direction. The case however is remarkable, and I prefer not to express an opinion in favor of either hypothesis. I hope only to provoke experimental researches, which can be made by any one who will take the occasion so to do.

The experiments of Professor Darwin in regard to insects and spiders put it out of the question that these creatures adopt as a ruse this appearance of death, or act with any design in the matter. The facts as regards animals higher in the scale of life call, on the other hand, for some different conclusion; but before this can be reached further research must be made, and other facts added to those already known.

THE WAR DEPARTMENT.

BY OLIVER W. LONGAN.

The word "department," as used in connection with the principal divisions through or by which the executive affairs of the government are administered, has very little if any significance, because it applies as well to the smallest subdivisions as to the three coördinate powers of our republic. Still another use was given it by a candidate for government appointment who, in response to a requirement of the Civil Service Commission to name the three great departments of the government, introduced a new application of the word by writing, "the Republican, the Democratic, and the Independent." And so with the name "War Department," its use applies it with equal propriety to the organization which administers the military affairs of the government and to the build-

ing in which its offices are located, just as the word church applies to the building and to the society of people which worships in it.

The War Department is one (the third in point of classification) of the seven divisions of the executive branch of the government whose chief officers form the President's cabinet. It comprises, beside the office of the Secretary of War, ten minor divisions called "staff departments," or "bureaus," each under the direction of an officer who holds the rank and position of a brigadier-general in the United States army, and including a military force of officers of the several ranks from captain up to colonel, some of whom are on duty in the offices in Washington, but a majority performing the duties appertaining to

their respective bureaus at military posts, or at the headquarters of the military geographical departments and divisions, or elsewhere as they may be directed by the Secretary of War. Each bureau has also a force of civilian employees who perform the clerical duties of the department under the direction of their respective officers. The clerks are divided into grades as follows, the salaries being determined by the grades: Chief clerks, \$2,000; clerks, class four, \$1,800; class three, \$1,600; class two, \$1,400; class one, \$1,200; clerks, \$1,000; copyists, \$900; the other employees being messengers, assistant messengers, watchmen, mechanics, laborers, etc. The names of the subdivisions are the Adjutant-General's, the Inspector General's, the Judge Advocate-General's, the Quartermaster's, the Subsistence, the Medical, the Pay, and the Ordnance Departments, the Corps of Engineers and the Signal Corps. The business of these bureaus will be mentioned in their order.

During the first year of the revolutionary war, and before the colonists had abandoned all hope that their difficulties with the mother country might be settled by a just recognition of their rights as English subjects, the colonial army under Washington was directed by the Continental Congress at Philadelphia. Ten days prior to the first anniversary of the battle of Bunker Hill, a resolution to absolve all allegiance to the British crown was introduced in Congress, and five days thereafter a resolution was adopted to appoint a "Board of War and Ordnance," to consist of five members of the Congress, to be organized as a war office which was to be the channel for military correspondence and orders, and an office of record to which the officers commanding in the army were required to send reports of the condition and disposition of troops. Washington wrote in reply to a dispatch from the President of the Congress, informing him of the institution of the board, that it "is certainly an event of great importance, and in all probability will be recorded as such in the historic page." As a beginning it possesses the interest to us to-day which attaches to all our institutions whose history can be traced up to the present degree of efficiency and finished organization which we regard with such pride and satisfaction, and which brings the feeling of security we enjoy in the midst of the most trying times of uncertainty. After a little more than one year of administration of military affairs by the Board of War and Ordnance as an advisory committee to Congress, a new organization was made called the "Board of War," consisting of three persons not members of the Congress, and the number was soon afterward increased to five members, who are frequently mentioned in the resolutions pertaining to the conduct of the war as Commissioners of the War Office, and the board is sometimes mentioned under the old, and sometimes under the new name. A review of the instructions and resolves of Congress to the board, and through it to the army, making regulations, appointing committees, creating offices for the control of supplies, money and war material, conferring or restricting authority and responsibility, reveals the character of the times and the inexperience of men better than the history of their individual acts can do it, and increases the marvel that success was ever reached through such apparent confusion; but it must have been a grand period for men who did not hesitate to undertake and plan and execute without the aid of "precedent," that potent influence which gives shape to a large proportion of executive administration to-day. But the time approached when the question of national organization must be settled, and although the prospect at the time (early in 1781) appeared to afford no more promise of final success than at any time during the struggle there seemed to be an intuition which led to a disposition of military affairs, so that the details might be gradually relinquished by the Congress to the charge of one executive officer in addition to the Commander-in-Chief whose authority was never curtailed by a department up to the hour he returned his commission to the body which had conferred it upon him. Early in 1781 the Congress undertook a plan for

the establishment of executive departments, and one of the offices created was that of "Secretary at War"—notice the preposition—with powers similar to those of the "Board of War," but enlarged in their scope, and released in a measure from supervisory direction. The board continued to act, however, for several months, probably because the Congress was unable to select the right man to fill the new office, but on the 30th of October, 1781, the officer who, ten days before, had received the sword of the defeated British general at Yorktown, was elected Secretary at War. The coincidence of surnames justifies the remark here that the first Secretary at War and the present Secretary of War bear the same. Step by step for a few succeeding years the duties and powers of the office were specifically defined by legislation, but at such intervals as to make the rules appear fragmentary, until on the 27th of January, 1785, a revision was made and all the loose lines were gathered into one instrument, which had for its enacting clause, "*Be it ordained by the United States in Congress assembled,*" and directed the Secretary at War to "keep a public and convenient office in the place where Congress shall reside," and that office for the first time was dignified with the name "Department of War." The resolves of Congress began also to take the form of instructions to the Secretary at War to issue his orders to the army, thus indirectly raising his position in the scale of authority and control to one not yet specifically recognized. An even administration follows until the end of the confederation and the new organization of executive departments under the constitution of the United States. A report made to Congress October 2, 1788, by a committee which had been appointed for the purpose of inquiring into the business of the Department of War, shows that the number of employees then in the department was four, whose aggregate annual compensation was \$1,500. To-day the force of more than fifteen hundred employees, receiving the gross sum of \$1,820,830, makes a notable contrast, and indicates the volume of increase in the business and the wonderful change of values.

The new government, under the constitution, went into operation practically on the 30th of April, 1789, when Washington was inaugurated at the old City Hall in New York as the first President of the United States, and became the "commander-in-chief of the army and navy." The first act of Congress relating to military affairs, to be approved by him, was the act of August 7, 1789, which directed "that there shall be an executive department, to be denominated the Department of War; and that there shall be a principal officer therein to be called the Secretary for the Department of War." This officer was to perform such duties as the President should direct relating to military commissions, land or naval forces, ships, or warlike stores, or Indian affairs, or the granting of bounty lands, or "such other matters respecting military or naval affairs as the President of the United States shall assign to said department." He was also authorized to appoint a chief clerk, who in the event of the removal of the Secretary, or the occurrence of a vacancy, should have charge of the records, books, and papers of the department (naval affairs, public lands, Indian affairs, and pensions were afterward transferred to other departments).

The title of "Secretary of War" appears to have been adopted as a matter of choice by the first Secretary appointed by Washington, the only change from the old title, it will be noticed, being the use of the preposition *of* for *at*, a change which we will agree could not to-day be reversed without provoking a liberal amount of criticism, both serious and humorous, if judgment may be taken from the notice universally given to trifling matters for the purpose of seasoning the news as we season our food, to give it a relish which an educated but not always cultivated taste demands.

During a period of years succeeding the establishing of the War Department, up to the war of 1812, it appeared to be an

agency, simple in organization and limited in authority, which is rarely mentioned in legislative acts, for it is a notable fact that the acts of Congress during this period relating to military affairs were almost all addressed to the President of the United States. Time and the progress of events brought to the Department other and more important matters than the clerical work of correspondence and keeping records, and the work not only of obtaining and preserving all manner of army supplies, but of providing for their production, led to the establishment of minor agencies, each one as it was brought into existence, adding to the functions of the Secretary of War, and giving him a superior directing authority. These agencies became subordinate to the War Department, but were liable to and did share with the army in the legislation which from time to time created or disbanded the active forces as the circumstances required. The departmental divisions of business were continued, however, and when one and another of the offices which corresponded with our present staff departments were discontinued the duties were maintained by provisional means until they were restored, or others of similar nature were created to take their places. In the course of time the bureaus became permanently established, and formed the links which connected the War Department, a civil office, with the army, and the Secretary of War, whose position in the beginning was simply that of an agent of the President for the administration of military affairs has come to be recognized as holding discretionary power and authority, although no change has taken place in his relations to the President on the one hand, or to the army on the other, except that in later years the laws and resolves of Congress relating to the business which he administers are addressed to him directly, instead of to the President, as in former years.

The interval which we must make here in the history of the department might be filled with items indicating its place and power during the period omitted, but the line of progress has been direct, and regularly approaching the condition which makes it possible at any time to accelerate its operations for the prosecution of active warfare, or to permit them to sink to the dream of peace, without, in either case, disturbing the perfect system of business.

That portion of the business of the War Department transacted under the immediate direction of the Secretary of War and the chief clerk of the Department, comprises divisions of records, correspondence, requisitions and accounts, advertising accounts, miscellaneous supplies, and connected therewith is a library of about sixteen thousand five hundred volumes, from which any employe of the Department may obtain books for temporary use. No proper idea of the business can be given in a written description without taking too much space for this article. As the central office of the Department, and having direction of the affairs of the several bureaus, all important matters connected therewith pass through it for the action of the Secretary.

The Adjutant-General now has charge of the records which in the early days were received and preserved in the War Office. He publishes all orders and conducts all correspondence from the Secretary of War and the commanding General to the army, issues appointments and commissions, receives, records and arranges for use and preservation rolls, reports and other official papers pertaining to the personal history of every officer and soldier in the army, from the day of appointment or enlistment up to the date the service ceases, from whatever cause; has charge of the business pertaining to the military academy, the military prisons, the recruiting service, the military reservations, and the records of bureaus and commands which existed during the war of the rebellion, and have since been discontinued; and from the records in his department the information necessary to the settlement of pension and other claims of officers and soldiers, of whatever nature, growing out of their service, is furnished.

The duties under the Inspector-General are the inspection of military posts and troops, particularly with reference to material, supplies, disbursing accounts, and any matters connected with the military establishment or pertaining to military laws or regulations upon which reports or advice may be required by the Department for the promotion of discipline, the proper performance of duty, or the reformation of abuses.

The Judge Advocate-General receives, reviews and records the proceedings of all military trials, and furnishes reports and information therefrom whenever required, and gives opinions upon such questions of law as may be referred to him by the Department.

The Quartermaster's Department is charged with the duty of furnishing transportation for troops, materials of all kinds, and all supplies; horses for cavalry and artillery; all camp and garrison equipage, forage, fuel and buildings; in a word, all manner of supplies except food, medicines, arms, and ammunition. The national cemeteries are under charge of the officers of this department.

The Subsistence Department provides all the food for the army, being charged with the duty of purchasing, distributing and issuing to all the stations occupied by troops. It also keeps in store for sale to officers many articles of regular supply not included in the ration table. The office of the Commissary-General of Subsistence occupies the building half a square north of the Treasury Department, in which Mr. Seward lived when he was Secretary of State under President Lincoln, and where the attempt was made to take his life on the same night the President was assassinated.

The Pay Department is just what its name indicates. From its officers every person in the military service, from the commanding General to the recruit receives his salary or pay. All persons in government employ immediately connected with the army, who are not paid by the Quartermaster's Department, receive their pay from the Pay Department.

The Medical Department, under the direction of the Surgeon-General, is charged with the care of the sick and wounded, and for this purpose procures all medicines, medical and surgical appliances, and other supplies appertaining to that special branch of the service. It is also an office of record, receives reports of all cases of disease, wounds or injury in the army, and furnishes information therefrom upon claims for pensions. It also furnishes artificial limbs to persons entitled to them, or pays a commutation in lieu thereof, to those who prefer it. The Department has collected a library of sixty-five thousand seven hundred bound volumes, forty-seven thousand pamphlets, and thirty-eight thousand dissertations upon subjects pertaining to the medical profession, which, with a medical museum of great value, occupies the building in which President Lincoln was assassinated.

The Corps of Engineers is a distinct arm of the service as well as a division of the War Department, and enjoys the distinction of an organization since 1802, when it was constituted the Military Academy, and held its connection with it for more than sixty years. Among the duties performed by the corps are the construction of sea coast defenses, fortifications, survey and construction of river and harbor improvements, geographical and lake surveys, and any other duties in the line of engineering, whether connected with the military establishment or not, to which its officers may be assigned by competent authority.

The Ordnance Department is charged with duties appertaining exclusively to the military establishment, the manufacture and storage of every description of gun or firearm, large or small, and of all kinds of warlike weapons, projectiles, and ammunition; of all equipments pertaining to the artillery arm of the service; with the experimental tests of all improved guns, and with the care of armories and arsenals. The injunction "in time of peace prepare for war" is practically heeded by this department.

MILTON AS THE POETS' POET.

The Signal Corps is an organization of comparatively recent date, but well known through the daily reports of indications or probabilities of the weather. In time of war the duties of the corps have been the transmission of messages by signal flags, colored lights, or the telegraph. In time of peace the instruction of officers and men in the use of signals and the telegraph and the construction of field telegraph lines is carried on. The limited space allowed for this article will not admit of a description of the service in connection with the observations of the weather, but these observations will be made the subject of a future article.

All the subordinate departments which are charged with the purchase of supplies have, as the Pay Department also has, the disbursement of very large appropriations, and the accountability for the funds and the property obtained is under a perfect system, governed by regulations which apply equally to all. The reports and returns pertaining thereto, which are made monthly and quarterly, are first examined in the bureaus of the War Department, and are then transferred

to the accounting officers of the Treasury Department, where they are finally audited and settled.

The present home of the War Department is in the new granite building known as the "State, War, and Navy Building," immediately west of, and about the length of one square from the President's mansion. The Department occupies the north wing, and will occupy the west and court-yard wings when completed. These "wings" are the divisions of the building, which form four sides, as four complete buildings might be placed to form a rectangle, with a large court in the center which is intersected by the fifth or court-yard wing. The whole area covered by the building, its approaches and courts is nearly four and one half acres. The cost of the completed portion has been about eight and one half million dollars. The office of the Secretary of War, and a portion of the office of the Adjutant-General is all that has yet found permanent quarters in the building, the east wing occupied by the Navy Department, and the south wing by the State Department. A full description of the structure may be postponed till its completion.

MILTON AS THE POETS' POET.

BY WILLIAM CLEAVER WILKINSON.

On the illuminated calendar of the C. L. S. C. appears this month the illustrious name of Milton. There remains hardly anything at the same time new and true to be said of the author of "Paradise Lost." It has, however, occurred to me that the members of our ever widening Circle might be glad to see what a rich garland he wears as poets' poet. This title has at different times been given to several different English names. Spenser was perhaps the first to receive it. Milton deserves it not less than Spenser. More, perhaps—for beside being a favorite poet with poets, Milton has happened also to be made the subject of poetical description and ascription beyond, as I should suppose, the fortune of any rival whatever.

It will, perhaps, be interesting, if not instructive, to gather here into a sheaf some of the laurels that have thus been wreathed around the brow of Milton by the laureate company of the poets since his day. The subject will be poetry, and poetry, too, will be the main part of the discussion.

Of course there is no way but to begin with Dryden's famous hexastich :

Three poets in three distant ages born
Greece, Italy, and England did adorn;
The first in loftiness of thought surpassed;
The next in majesty; in both the last.
The force of nature could no further go;
To make a third, she joined the other two.

The foregoing is not very good poetry, but it is very good epigram, as might have been expected—for Dryden is a master epigrammatist, if but an indifferent poet. Do not scrutinize the present epigram too nicely, and how admirable it is! The last two lines are the gist of it. What precedes is only preparation for these two. Necessary preparation, but as criticism, not ideal. For though "loftiness of thought," answering for sublimity, may doubtfully do to stand as the chief characteristic of Homer, and though Virgil's quality may fairly well be expressed in the single word "majesty," these two things, conceived as different from one another, can not be said to compose together the character of Milton. Milton surpasses in sublimity, no doubt, and he is surpassingly majestic; but you would hardly balance the one attribute against the other to express summarily his complement of qualities. The two attributes, sublimity and majesty, resemble each other too much to be good antitheses. But this paper is not to be a criticism.

Let us have a sharp contrast next. Gray in his ode on the "Progress of Poets :"

Nor second he,

(The poet means not second to Shakspere, whom he has just celebrated)

Nor second he, that rode sublime
Upon the seraph wings of ecstasy
The secrets of the abyss to spy.
He passed the flaming bounds of place and time,
The living throne, the sapphire blaze,
Where angels tremble while they gaze,
He saw; but blasted with excess of light
Closed his eyes in endless night.

Gray's method is nowhere better exemplified than in this resplendent tribute to Milton. The very terms in which he glorifies his subject are with fine adaptation borrowed from that subject himself. The coincidence upon which here we chance is too good to be disregarded. Let us digress enough to bring in Gray's sympathetically varied characterization of Dryden which immediately follows in the text of the ode :

Behold where Dryden's less presumptuous care
Wide o'er the fields of glory bear
Two coursers of ethereal race
With necks in thunder clothed, and long resounding pace.

The equaling of Milton with Shakspere by Gray reminds of Tennyson in his "Palace of Art :"

And there was Milton, like a seraph strong,
Beside him Shakspere bland and mild.

But Tennyson has something more elaborate on Milton. This happens to be in one of his experimental pieces. Trying that master hand of his—turned "prentice" on this occasion—at alcaics, a meter not often attempted in English, he makes Milton his inspiration :

O mighty-mouthed inventor of harmonies,
O skill'd to sing of Time or Eternity,
God-gifted organ-voice of England,
Milton, a name to resound for ages,
Whose Titan angels, Gabriel, Abdiel,
Star'd from Jehovah's gorgeous armories,
Tower, as the deep-domed empyrean
Rings to the roar of an angel onset—
Me rather all that bowery loneliness,

The brooks of Eden mazily murmuring,
And bloom profuse and cedar arches
Charm, as a wanderer out in ocean,
Where some resplendent sunset of India
Streams o'er a rich ambrosial ocean isle,
And crimson-hued the stately palm woods
Whisper in odorous heights of even.

From one poet laureate of England to another is an easy transition. Run we back to Wordsworth. Of Wordsworth's sonnet to Milton I need give only the last six lines :

Thy soul was like a star, and dwelt apart,
Thou hadst a voice whose sound was like the sea;
Pure as the naked heavens—majestic, free,
So didst thou travel on life's common way
In cheerful godliness; and yet thy heart
The lowliest duties on herself did lay.

Very different in spirit from anything hitherto given is that burst of Shelley's in his "Adonais," allusive to Milton. It is curious how Shelley, in his unchastised youth of eager beating against the bars of convention and law, found his sympathy with Milton as much in ideas political as in ideas poetical :

He died

Who was the sire of an immortal strain,
Blind, old, and lonely, when his country's pride—
The priest, the slave, and the liberticide.
Trampled and mocked with many a loathed rite
Of lust and blood; he went, unterrified,
Into the gulf of death; but his clear sprite
Yet reigns o'er earth; the third among the sons of light.

It is the triumph of Milton as poet that he keeps his empire undisputed over minds that kicked with utmost energy against those religious sentiments which not only Milton the man held dearest, but which Milton the poet insisted on making of the very fabric of his verse. Byron, too, and this amidst the ribald freedom of his "Don Juan"—amidst the freedom of it, and with the freedom of it—says of Milton :

A little heavy but no less divine.

It will provide a conclusion conformed to a canon of ancient art in letters which forbade climax at the close, if now we present some lines from Byron, remarkable indeed, rather for ingenuity of adaptation than for high poetry, but still illustrative of the esteem compelled from their author for the sublime genius of Milton. The lines to be cited belong to Byron's "Hints from Horace," a work generally neglected, but certainly of notable merit, if not comparatively so good as Byron himself accounted it—who, I believe, preferred this satirical paraphrase of Horace to his "Childe Harold." For the full appreciation of the passage following, one rather needs to have before him for comparison the corresponding text of Horace. Byron paraphrases and satirizes, the reins flung loose on the neck of his foaming Pegasus. Bowles and Southey have just been named for contempt, when, in contrast, the modesty and majesty of Milton's opening is referred to :

Not so of yore awoke your mighty sire
The tempered warblings of his master lyre;
Soft as the gentle breathings of the lute
"Of man's first disobedience and the fruit"
He speaks, but, as his subject swells along,
Earth, heaven and Hades echo with the song.
Still to the midst of things he hastens on,
As if we witnessed all already done;
Leaves on his path whatever seems too mean
To raise the subject, or adorn the scene;
Gives, as each page improves upon the sight
Not smoke from brightness, but from darkness light;
And truth and fiction with such art confounds,
We know not where to fix their several bounds.

"There is more of poetry," says Moore, "in these verses upon Milton than in any other passage throughout the paraphrase." And more truth than poetry at that, one might justly add.

The subject is not exhausted, but enough has been produced to show that, in an eminent sense, Milton is a poets' poet. I bespeak for my favorite among all the bards of all time a joyous and grateful observance of his annual day from every loyal Chautauquan.

GEOGRAPHY OF THE HEAVENS FOR DECEMBER.

BY PROF. M. B. GOFF,
Western University of Pennsylvania.

THE TELESCOPE.

Since much that we know about the heavenly bodies, has been revealed to us through the medium of the telescope, it may be advisable to give some slight account of this instrument. As early as 1608 it appears to have been invented in Holland by a professor of mathematics named James Metius, though the honor is claimed by their friends for several other parties, among them Lipperhey and Jansen, spectacle makers in the town of Middleburg. The claims of Jansen were supported by Peter Borelli, in a small volume published in 1655, entitled "De Vero Telescopii Inventore," and he was for a long time regarded as the inventor. The story runs that Jansen had shown a telescope sixteen inches long to Prince Maurice and Archduke Albert, who realizing the importance of such an invention in war, induced him to keep it a secret. But the narrative given by Borelli rested on such a slight foundation, that it obtained but little credence. Later evidence shows that Hans Lipperhey, on the 2d of November, 1608, made application to the states-general of Holland for a patent for "an instrument to see with at a distance," but was refused on the ground that the invention was already known. While there is little doubt but that the discovery was,

as claimed, made in Holland, it is also highly probable that great efforts were put forth for some time to keep the matter a profound secret. At least, no results were published to the world until made known by Galileo in the manner thus related by Professor Newcomb: "About six months after the petitions (for patents to the states-general of Holland) of Lipperhey and Metius, Galileo was in Venice on a visit, and there received a letter from Paris, in which the invention was mentioned. He at once set himself to the re-invention of the instrument, and was so successful that in a few days he exhibited to the astonished authorities of the city a telescope magnifying three times. Returning to his home in Florence, he made other and larger ones which revealed to him spots on the sun, the phases of Venus, the mountains of the moon, the satellites of Jupiter, the seeming handles of Saturn, and some of the myriads of stars, separately invisible to the naked eye, but whose combined light forms the milky way. But the largest of these instruments magnified only about thirty times, and was so imperfect in construction as to be far from showing as much as can be seen with a modern telescope of the same power."

The telescope has been aptly compared to an eye. In the eye nearly parallel rays of light fall on a lens, and this lens

throws an image. In the telescope, nearly parallel rays of light fall on a lens, and this lens throws an image, and then another lens enables the eye to form an image of that image by again rendering the rays parallel; these parallel rays entering the eye just as rays do in ordinary vision. The efficiency of the telescope depends on its power of illuminating and magnifying. If the object glass (in a "refractor," as an ordinary spy-glass, the lens next the object viewed) be twenty times greater than the pupil of the eye, it receives twenty times more light, and forms an image theoretically twenty times as bright (though practically much of the light is lost by reflection from and passage through the object glass). The magnifying power depends on the relative focal length (the distance from the lens to the image) of the object glass and the eye-glass (the lens next the eye). For example, if the focal length of the object glass be twenty-five inches, and that of the eye-glass one-half inch, then the magnifying power is represented by the quotient of twenty-five by one-half, which is fifty. In order to obtain a good image the illuminating power must be good and the magnifying glass (eye-piece) perform its work well.

Since the time of Galileo, refracting telescopes have been of course much improved. Their size also has increased until they are now constructed with object glasses twenty-six inches in diameter; and it is reported that one is projected for the Lick Observatory in California, which is to have an objective thirty-six inches in diameter. Reflecting telescopes, so called because instead of refracting or bending the rays of light, they reflect them from a concave mirror, have been constructed with circular mirrors six feet in diameter, and it is believed by some makers that they can be successfully operated when the mirrors are as much as seven or eight feet in diameter.

It must not be supposed, however, that in general the greater the telescope, the more successful the observations. Both calculation and experience indicate a limit beyond which increase in size, even if it affords greater power, diminishes in clearness. And it is of little value to us that we bring the moon apparently within forty miles, if we can not distinguish its features—if the face of the "man in the moon" should be a mere blur, like a blot on a piece of paper. It is, in fact, exceedingly doubtful whether the moon has ever been seen through the telescope so well as it would be seen with the naked eye at a distance of 500 miles.

To afford an idea of what has been done in the manufacture of these instruments we mention the following: Of refractors, the one in the United States Naval Observatory at Washington has an object glass twenty-six inches in diameter; that of Mr. R. S. Newall, Gateshead, England, an object glass of twenty-five inches; Observatory of Harvard College, Cambridge, Mass., fifteen inches; Allegheny Observatory, connected with the Western University of Pennsylvania, at Allegheny, Pa., thirteen inches; Michigan University, at Ann Arbor, Mich., twelve and five-tenths inches; Middletown University, Connecticut, eleven inches. Of reflectors, the one constructed by the Earl of Rosse, at Parsonstown, Ireland, has a mirror six feet in diameter; the Observatory of Melbourne, Australia, four feet; and Mr. S. Lassell, Marblehead, England, two feet in diameter.

THE SUN

During this month makes us his shortest visit. This he does on the 21st, making his stay about 9h. 16m. in length. Winter begins theoretically the same day at 4:51 a. m., when the sun stands still before he starts on his northern journey, and the astronomers say that the sun enters *Libra*. On the 24th at 2:00 p. m., sun is 90° east of Uranus, that is, is quartile with this planet; on the 12th, at 2:00 a. m., he is 180° from Jupiter, that is, in opposition; on the 31st, at 11:00 p. m., nearest the earth; on the 1st, 16th and 30th he rises at 7:05, 7:18 and 7:24 a. m., and sets at 4:34, 4:35 and 4:44 p. m., respectively. Twilight ends on the 16th at 6:17 p. m.

THE MOON

Presents the ordinary phenomena of its changes as follows: Full on the 2d, at 1:51 p. m.; last quarter on the 9th, at 6:22 a. m.; new on the 17th, at 8:16 a. m.; first quarter on the 25th, at 8:13 a. m. It rises on the 15th, at 6:08 a. m., and sets on the 1st and 30th, at 5:21 a. m. and 5:13 a. m. respectively. Is nearest the earth on the 2d, at 9:30 p. m., and again on the 31st, at 10:48 a. m. Is farthest away from the earth on the 16th, at 11:06 p. m. Runs highest on the 4th, on which date its altitude equals $68^{\circ} 1' 33''$; and on the 31st, when its altitude amounts to $68^{\circ} 1' 56''$. It runs lowest on the 17th, when the elevation is $30^{\circ} 56' 19''$ in latitude $41^{\circ} 30'$ north.

MERCURY

Presents us this month with an unusual number of phenomena, none of which, however, are of a striking character. He rises on the 1st at 8:28 a. m.; on the 16th, at 8:55 a. m.; on the 31st, at 7:48 a. m.; sets on the corresponding days at 5:16, 5:53 and 5:20 p. m.; that is, during the entire month setting from one-half hour to one and one-third hours later than the sun; and thus being visible to a careful observer for perhaps ten or twelve days both before and after the 17th, the day on which he reaches his greatest distance ($20^{\circ} 12'$) east of the sun. His motion during the first seventeen days is $30^{\circ} 33' 44''$ direct, and for the remaining fourteen $5^{\circ} 9' 55.5''$ retrograde. Diameter increases from $5.2''$ to $9.6''$. At 3:00 p. m. on the 4th he is $1^{\circ} 26'$ south of Mars; on the 19th, at 6:34 a. m., $6^{\circ} 27'$ south of the moon; on the 25th, at 10:00 a. m., stationary; at midnight on the 29th, $2^{\circ} 25'$ north of Mars; and on the 30th, at 5:00 a. m., reaches its nearest point to the sun.

VENUS

Is now on the wane, decreasing from $14.2''$ to $12.4''$ in diameter, though still an object of beauty in the morning sky. She rises at 4:03 a. m. on the 1st; at 4:36 a. m. on the 16th, and at 5:10 a. m. on the 31st. Her motion is direct and equals $38^{\circ} 30'$ of arc. On the 14th, at 4:37 a. m., she is $1^{\circ} 15'$ south of the moon.

MARS

Makes a very poor showing, his diameter being small, only about $4.2''$, and his rising and setting nearly the same as that of the sun. At 8:35 a. m. he rises and at 5:33 p. m. sets on the 1st; on the 16th, rises at 8:25 a. m., and sets at 5:25 p. m.; and on the 31st, rises at 8:11 a. m., and sets at 5:21 p. m., remaining above the horizon on an average of about nine hours each day. His motion is direct and amounts to $25^{\circ} 57'$ of arc. On the 18th, at 1:35 p. m., he is $5^{\circ} 59'$ south of the moon. His declination on the 1st is $24^{\circ} 17'$ south, and on the 31st, $22^{\circ} 58'$ south.

JUPITER

Is morning star throughout the month, rising November 30th at 11:07 p. m., and setting December 1st, at 12:19 p. m.; on the 15th, rising at 10:10 p. m.; setting next day at 11:22 a. m.; and on the 30th rising at 9:10 p. m., and setting on the 31st at 10:23 a. m. Direct motion $31' 39''$; retrograde motion $12' 22''$. Diameter increases from $36.2''$ to $39.6''$. On the 8th, at 10:52 a. m., $4^{\circ} 10'$ north of the moon; about midnight on the 20th, stationary.

SATURN

During the former part of the month will be a morning star, but during the latter and greater part an evening star, though shining during most of the night time. He rises on the 1st at 5:19 p. m., and sets on the 2d at 7:57 a. m.; rises on the 16th at 4:14 p. m., and sets on the 17th at 6:52 a. m.; rises on the 31st at 3:11 p. m., and sets on the first day of the new year at 5:47 a. m. His motion, $2^{\circ} 39' 15''$ of arc, is retrograde; and his diameter diminishes about two-tenths of a second of arc. On the 3d, at 5:48 a. m., $3^{\circ} 15'$ north of the moon; on the 12th, at 2:00 a. m., 180° west of the sun; and on the 30th, at 1:48 p. m., $3^{\circ} 16'$ north of the moon. As mentioned in a former number of THE CHAUTAUQUAN, from this time for several months will be the most favorable for seeing the rings (the "handles" of the seventeenth century) of this planet.

URANUS

Has a direct motion of $35' 1''$ of arc during the month, and its diameter increases two-tenths of a second. On the 10th it will be found, at 11:08 a. m., $1^{\circ} 37'$ north of the moon; and on the 24th, at about 2:00 p. m., 90° west of the sun. It will also appear as an evening star, rising at 1:28 a. m., and setting at 1:26 p. m. on the 1st; rising at 12:30 a. m., and setting at 12:28 p. m. on the 16th; and rising at 11:33 p. m. on the 30th, and setting at 11:39 a. m. on the 31st.

NEPTUNE.

"Distance lends enchantment to the view." Our imagina-

tion may readily picture a huge ball having a diameter of 34,500 miles, and a density of 1.15 times that of water, at a distance of 2,775 millions of miles from the sun, and making its way around it in a period of about 165 years, at the rate of about 3.36 miles per second; but methinks most of us would prefer to remain where we are rather than migrate to a "land of liquors" and spend our lives in swimming through oceans of liquefaction. Neptune rises on the 1st at 3:34 p. m., and sets on the 2d at 5:30 a. m.; rises on the 16th at 2:35 p. m., sets on the 17th at 4:29 a. m.; rises on the 31st at 1:35 p. m., sets on January 1st at 3:29 a. m. Retrogrades $40' 35''$ of arc. Diameter, 2.6''.

THE LIBERAL UPHEAVAL IN NORWAY.

BY BISHOP JOHN F. HURST.

In no European country has there been, in the last half century, such a thorough coming up of liberal sentiment concerning all that regards the rights of the citizen and the Christian as in Norway. Lying at the northwest corner of the continent, far removed from the excitements and jealousies common to the nervous central countries, Norway has moved on in its even way, and cared little for the general current of these lands. But these Norwegians have not been asleep. Nor has there ever been a time when they have slept, from the hazardous day when their Vikings invaded Britain, and became forever a part of the bone and fiber of Scotland in eastern England, down to our century. All Norwegian history is a romance, whether in former or recent times. The unexpected change happens on those mountain sides and in those happy valleys, and when a new movement does begin there it is apt to overthrow the whole of Scandinavia. Norwegian impulses, as a rule, have such abundant vitality in them that no resistance can be made successfully against them. They are as invincible with their new liberal policy, in state and church, as was their Harold the Fair-Haired, who fought and slew twenty-two hostile kings of Norway, in the one battle of Stavenger, and made the land first and for the whole future one and strong, and then took for his queen the fair lady who had declared she would never marry him until he became king of United Norway. He laid deep plans, and then both wise and believing, waited ten long years, and so came the Norway of to-day, stretching from North Cape down to Land's Nose.

Here is an instance of the old and the anticipated never taking place in Norway. When the country separated from Denmark in the year 1814, and became consolidated with Sweden, it produced its own constitution, and has ever since been independent of either Scandinavian country, and produces all the liberal political and ecclesiastical sentiment in northern Europe, so far as the continent is concerned. But Norway has the same king as Sweden, and the two constitute the kingdom of Sweden and Norway. There is, however, nowhere a parallel to their internal arrangements. While the countries are one, there is a broad strip of felled forest, or open land, which marks the boundary line between them. They have two different postal systems, and two classes of postage stamps. The crowning of the king in Stockholm does not make him king of Norway. He must go five hundred and twenty-seven miles northwest, and be crowned in the cathedral of the ancient capital of Norway, Trondhjem, and be blest by Norwegian clerical hands, and benedictions rung out by Norwegian bells, before he is king of Norway. Then, too, he must have not only a Swedish cabinet and court, resident in Stockholm, and his two houses of Parliament as well, but must have the same double headed arrangement in Christiania, the capital of Norway. He must have his palace and court, his upper and lower

houses of Parliament, and his Ministry. Sweden can not make a law for Norway, nor the latter for the former. The king has two sets of men for everything, and unlike most kings, has duplicate critics on every question of royal action.

The Norwegian Parliament, or Storthing, has always been a troublesome thing to handle, by both kings and nobility. It is made up of rich and poor alike—all men who prove themselves worthy of the popular confidence. Until 1869 it met only triennially, and as soon as it had fought a few months for the people it could say no more for so long a time that there was ample opportunity for its legislation to be half forgotten, and, where there was a will, to be often evaded. But so rapidly did the liberal sentiment grow throughout the land that a law was at last made requiring the Storthing to meet annually. This was the fatal day for the rule of the aristocratic and bureaucratic spirit in Norway. When, in 1869, for the first time, the parliament of the country found itself compelled to come together every year, to revise the affairs of the country, it began a series of legislative acts which covered all the great and overlooked needs of the people, and, without treading upon the authority of the throne, did pursue such a course as the kings had been accustomed to think belonged only to them. In 1872 the Storthing went so far as to order that the king's ministers, who hitherto had been shut out from all participation in the proceedings of both houses, might appear, and in case of need must appear, and give all needful information concerning the points at any time under discussion. They must be "interpellated" without let or hindrance, and in this way be held responsible to the popular representations. But the king would not sign this law. His ministers were antideluvian and conservative, and strongly advised him not to do it. The Storthing could do nothing. Here was a violent clash between the people and the throne, and the relation was strained more violently than at any other time in the last thirty years. The fact is, the people had waked up, and were moving on. The Storthing adjourned, and the members went home.

Now began a strong current of liberal sentiment, which overspread the entire country. In five years, or by 1877, there was such a liberal Storthing in session that the law requiring the ministry to appear in person and give account of their discharge of official duty, was again passed, with an overwhelming majority. But the king and his ministry refused again to favor it. The royal signature was withheld, and so the law remained a dead letter. The same thing took place in 1879. The same refusal knocked it to pieces. In 1882 matters began to culminate. The Storthing passed the same law, by a vote of one hundred and five to eight, and determined to see it signed and executed. The king lost all patience. His ministers advised him not only not to sign it, but to veto it. This they supported, as his right, by a false interpretation of an ar-

ticle of the constitution. The Law Faculty of the University of Christiania indorsed the veto as constitutional, and so for the moment things seemed to be settled. Here was a case, however, where the people stepped in, and formed themselves masters of the king and his willing instruments. The next Storthing boldly declared that the new law was valid, with or without the king's sanction, that he had no right to absolute veto at all, and demanded the government to promulgate the new law without ceremony, as a part of the laws of the land. This the ministers refused to do. This procedure, with several other unconstitutional acts, caused the Odelsting, or select body of the Storthing, to remove the ministers before the Rigsret, which is the supreme court. From August 1883 until January 1884 the court deliberated on the case, and at last pronounced its verdict. We venture to say that no such excitement has been seen in Norway since it dropped off from Danish rule. By this verdict the entire ministry, including the prime minister, Selmer, were declared to have forfeited their right to be royal advisers, and two of the number were fined eight thousand crowns, as penalty for disobeying the laws.

The king still hesitated. He claimed that he had the right of veto, and was going to exercise it. The old and impeached ministry went out, of course, but the new one was a question. He chose, as his next ministry, the same kind of men he had been having. They were known in the country as enemies of the people's rights, and the storm of indignation was violent throughout the country. In this chaotic condition, Sweden came in with its advice. The ministers over in Stockholm saw that there was danger of losing Norway entirely, and they plainly told the king that he must make peace there at all hazards. The king now looked at the status of things with great care, and seems to have feared for his crown. He turned suddenly about, and chose a new ministry, with the renowned liberal leader, Johan Sverdrup, as his premier. For thirty-three years this man had been an advocate of the people's rights, and during all that time had been a member of the Storthing. He

was known in every valley and on every mountain in the land of the midnight sun, as the one man who could be trusted to defend the poor and fight for the largest liberty to every one. He had been for at least a quarter of a century the most powerful man of the country. He was feared and hated by every despotic and aristocratic spirit in the land, and not one even dared to attack his patriotism and honor. That King Oscar should choose Sverdrup as his prime minister was infinitely more of a revolution than when Queen Victoria took Gladstone in place of Beaconsfield, to select a new ministry and preside over it.

The changes consequent upon this new and happy resolution of the king to make peace with the liberals, have been complete, and of great numbers. The question of the king's veto of a law passed by the Storthing is settled forever. He can not do it. The Storthing is king, in fact. No sooner were the new ministry in power than they appeared in Parliament, took part in all debates, answered all questions concerning the policy of the government, and, to cap the climax, enlarged the right of suffrage to such an extent that forty thousand citizens could participate in all the canonical and political elections, for the first time. As to the work done, the Storthing now did more business in one week than had been done in months before.

This change in the political structure of Norway is the most significant event in Scandinavian history since 1814. It not only covers the past, but promises grandly for the future, to see the coming of the people to the front, in the land of our old Norse ancestors. And we may depend upon it that in Norway there will be no going backward. The king has had a hard task, but when the critical hour came, he chose discretion and the interests of the people. This assertion by the people, that they are supreme, means more than merely political liberation. It means that the day is not far distant when the Norwegian state church will be placed away among the rest of the useless antiquities.

HOW TO HELP THE C. L. S. C.

BY CHANCELLOR J. H. VINCENT, D.D.

The C. L. S. C. is an institution. It has an aim, a plan, an organization, officers and members. It began, has grown, and will continue to grow. The ends it proposes are useful and much needed. They lay hold of personal character. They reach society in the family, in the community, in the church. They are ends intellectual, moral, domestic, social, and religious. Every reason that can be urged in favor of general education, of refined manners, of cultivated tastes, of religious principles, of personal influence in favor of the true, the beautiful and the good, may be presented in behalf of the Chautauqua Literary and Scientific Circle. Its enthusiastic alumni, its undergraduates and outside persons of sound judgment who have studied its philosophy and watched its progress have said many strong and beautiful things in commendation of it. And there is no danger of saying too much, for however crude the beginnings of the movement, one may easily see in it the most splendid possibilities. The universal praise which the scheme has elicited is all deserved. The C. L. S. C. is a great institution.

But it must be remembered that institutions, however lofty in purpose and practical in organization, can not grow or work by virtue of mere aim and plan. Ideals and artistic apparatus are essential, but without personal genius and labor are impotent in the world of art. Something more is necessary to a transatlantic passage than a dock at Liverpool and a seaworthy steamer in New York. Between the two lie the conditions of success in human enterprise and effort. The C. L. S. C.

needs appreciation as a scheme, but it needs also work-wise, unremitting, indefatigable work, on the part of those who believe in it.

The problem before us now is: How may we help the C. L. S. C.? Every member who receives benefit from it, and who believes in its value to others, may become an advocate and representative and thus may induce numbers to test its worth. This service, voluntary and uncompensated, is due to the Circle. I propose to show how it may be most effectively rendered.

1. There are multitudes of people who would welcome the C. L. S. C. as an angel of strength and comfort, if its existence were but made known to them. They have no definite idea about it. The mystic letters which represent it they have often seen, but having "no interest in secret societies" have not even asked what the C. L. S. C. is. They have seen the word "Chautauqua," and know that Chautauqua County is famous "for butter and for Republican majorities." Or they have heard about a "camp meeting at Chautauqua," which being a camp meeting must of course be Methodist—and in "Methodist camp meetings they have never taken much interest"—indeed, they have a "prejudice against such things." As for a "Sunday-school Assembly" at Chautauqua, if they do not think of it as "a big picnic with lots of children and barrels of peanuts," they class it among "the pious conventions which only very good people care to attend." Thus the widespread name

of Chautauqua means half a dozen different things, according to the measure of the hearer's ignorance. Now, members of the C. L. S. C. can do a world of good to people who would welcome and enter the Circle if they knew about it, by telling of its aims to persons whom they casually meet, by distributing the "Popular Educational Circular," and by handing out judiciously copies of "The Green Book." Thus they could soon disabuse minds which hold the superficial views of the movement above indicated and convince them that Chautauqua is not merely a "creamery," that it is not a camp meeting, that it is not Methodist, that it is not a children's or Sunday-school picnic at all, that Sunday-school work has a place, but a comparatively small place in the great Chautauqua Idea and movement, and that Chautauqua is CHAUTAUQUA—peculiar, instructive, broad, far-reaching—a place and an idea, a school and a society, a life and a power, representing all that is high in human aims, all that is delightful in human fellowship, all that is ennobling in broadest culture, all that is sanctifying in intelligent and reverent worship. A few words would do all this, for hosts of people who need and long for the very ministry our noble cause fulfills. Speak the words, then, dear fellow students, and distribute widely the circulars which spread this information.

2. Having sown the seed watch the growth. Urge the friend to whom you broach the subject to join the Circle. Take his or her name and address; a postal card later on may be a reminder. Insist upon prompt action in sending for blank form of application. Elicit questions. Remove difficulties. Answer objections. Be earnest and urgent, and from the seed by the wayside may come up quite a harvest of good. You can not be too urgent or emphatic. The cause and the institution justify your zeal, and those whom you win to the experiment will soon give it unequivocal indorsement, and will add a vote of thanks, for your suggestion and importunacy. Personal interest in people always pays. In a good work this interest yields the best results. And this is a good work. The young man you follow up with circulars and solicitations and offers of help will finally yield through your very earnestness in his behalf. And the more you help, the more zeal in the cause of the C. L. S. C. you will develop in him. The discouraged woman to whom the world of letters seems as inaccessible as the royal palace at Windsor, will believe your testimony because of the faith and fervor you show, and having had the door opened to her will enter in, and at every step will give thanks for what she finds, and for the thoughtful, sympathetic soul that pointed her to Temple of Knowledge.

3. Use the local press in the interest of the Circle. The columns of any paper in the land will be open to occasional items concerning the Chautauqua movement and its courses of reading. Editors who want news will be glad to receive your communications. Editors who believe in popular education will take a personal interest in the matter. They will cheerfully write editorials on some phases of the subject. They will report meetings of your local circle. They will publish choice literary extracts in the line of the current required reading. Suppose the subject for the month is Greek history and literature. Find some gem from the critics, some exquisite translation of a passage from Homer, Plato or *Æschylus*, some word-picture from the historians or from modern travelers; copy carefully, send to the editor, and ask its publication, and you will be surprised to find how glad editors will be to enrich their pages through your skill, taste and services. Every such item of news or passage from literature, if connected with Chautauqua or the C. L. S. C. will advertise the Circle and increase its membership.

4. Use the public schools. Secure the coöperation of teachers, especially high school principals and superintendents. Do not try to induce pupils to join the Circle. They have enough to do already, at school and at home. But watch the high school graduates, and those young people dropping out of the various

grades, "giving up school," as so many thousands do. Talk to them about what the C. L. S. C. will do for them. Tell them all about the "college outlook," the "diploma," the "seals," the "societies," and "degrees." Urge them to enter this "Home College." Press upon them the advantages. And if the arguments you present be so strong as to determine them not to give up school, but to keep on and enter college, you can afford to excuse them from entering the C. L. S. C. for this is the highest end of our Circle: To awaken an interest in college education, and to induce young people to secure it. Do not be disheartened if now and then a public school superintendent or teacher looks disapprovingly or with a faint touch of scorn on the C. L. S. C. It will be because he does not understand it. No scholar of a high order, who knows what we aim at and are doing, can disapprove the movement. He may object to this book or that. About what book are there no differences of opinion? He may find fault with the relative proportions of literature and science in our course. All curriculums are subjected to such criticisms. He may smile at our desires for promoting the *esprit de corps*. College societies, college athletics, college exhibitions have been often severely denounced as puerile, dissipating, and all that. And one has read college songs that have not been wholly weighted with wisdom or composed in conformity with highest rhetorical standards. No wise teacher can afford to sneer at the C. L. S. C. The most eminent educators of the country are in sympathy with it. Give your public school teachers a knowledge of the system and they will coöperate with you in the promotion of its interests.

5. Get the college men of your place enlisted. They are bound to help it. The C. L. S. C. is among all the educational movements of the age the best friend of the college system. It is a John-the-Baptist, going in advance and preparing the way in a wilderness-age of mercenary ambition, and among masses of people apathetic concerning especially the higher education. It goes into a household and captures parents while the children are yet young or unborn. It gives intellectual hope, confidence and ambition to those full grown men and women who supposed having left school their education had been finished. It gives them a new world to live in, a world of good books, a world of high art, a world of refined society. And into this world the children are born, and in this world they are trained, and because of this larger, nobler world they go to college. What put those better books and better pictures into the home? The C. L. S. C. What inspired the literary ambition in these mature people? The C. L. S. C. What filled the house with college atmosphere and college longings? The C. L. S. C. What led the mother to say and sing over and over again to the smiling infant in her arms, "My darling is going to college one of these days?" The C. L. S. C. If any people on the continent should honor and further the C. L. S. C. it is the college people, and as they learn its work they see its worth and give it sympathy and help. Our most enthusiastic friends are college presidents and professors.

Therefore make a point of enlisting college people in the enterprise. They will be glad to join. It will do them good after these years of neglect to read up Greek-in-English with Dr. Wilkinson, or to have Professor Appleton and Dr. Edwards tell them in their clear way what additions have been made to the science of chemistry since it was studied in the old college laboratory. There is not a subject or a book in the C. L. S. C. course that it would not pay any college graduate to read over again. And the really wise ones among them will do it. We have thousands of college graduates on the record lists of the Circle.

Where these men and women may not care to join for their own sakes they may be induced to give *prestige* to the movement for the sake of others. This is a power they have. They may well be proud of it; and if by putting themselves side by side with less favored people as fellow-students, they can help

without seeming to do it, they may add to the influence and profit of the Circle. Stir up and use the college people.

6. And now for the ministers! No class has greater influence in matters pertaining to education. To hear some wise-aces talk one would suppose that churches and ministers were afraid of education. The fact is that both popular and higher education owes more to the church than to any other organization on earth, and college presidents and professors have for the most part been clergymen or active laymen ready for Christian service. The most efficient factor in the educational movements of the world is Christianity.

The ministers are able to do more for the C. L. S. C. than any other class. They have influence over the homes, and especially over the youth of their congregations. If they do not it is their own fault; and I have sometimes felt that the Chautauqua plan was a providential appliance adapted to the age, by which pastors may secure a firmer hold upon the young people, and keep them in more perfect sympathy with the social and spiritual ideas which it is the business of the church to set forth. What intellectual dissipation and what moral weakening follow the loose reading habits of the age! How can a minister of Christ bring people to an appreciation of stability, purity, thoughtfulness, by sermons on one day of the week while all the other days are filled (what time is left from business) with sensational and demoralizing stories, unreal in their pictures of life and fearfully false in the ethical and theological principles they embody? How can a minister train his people to solidity and self-sacrifice and spirituality, whose highest ideas of "society" are expressed in the sensuous and dangerous pleasures in which a frivolous world delights, and which

by its consciousness requirements are made "fashionable"? Priestly prohibition is worthless. Bitter denunciation is worse. Appeals to higher tastes are useless—while the higher taste is lacking. There is only one way out of the difficulty. It is by "the explosive power of a new affection." To learn to loathe the low, one must learn to love the high and holy. To banish bad books we must create a delight in good books. To make worldly society seem the sensuous and senseless thing it often is, we must create a taste for refined, elevating and rational society. To put dignity and stability into a life we must feed it on truth, and cause it to delight in serving others. The C. L. S. C. is the pastor's helper in all these lines. It puts good books into the hands of youth and age. It opens broad fields for exploration. It discovers and develops personal aptitude. It gives high ambitions. It makes conversation with rational and cultivated people more agreeable than frivolous amusements which have neither ideas nor useful inspiration in them. It quickens conscience. It gives dignity to life. It makes usefulness more desirable than self-gratification. It supplements Sunday aspiration by week-day effort, and increases the power—intellectual, social and spiritual—of every life and of every home into which it comes. All this our ministers should feel. If they knew they would feel. Then cause them to know. By talk and by circulars stir them up.

When new tastes are developed among their young people, tastes sanctified by prayer and fostered by lectures and lessons, and books and conversation, the ministers seeing the good work will appreciate the agency, and thank you for calling their attention to the C. L. S. C.

These are some of the radical ways of helping the C. L. S. C.

OUTLINE OF REQUIRED READINGS.

DECEMBER, 1884.

First Week (ending December 8).—1. "Preparatory Greek Course in English," from page 172 to 192.
2. "History of Cyrus," from page 1 to 144.
3. "What English Is," in *THE CHAUTAUQUAN*.
4. Sunday Readings for December 7, in *THE CHAUTAUQUAN*.

Second Week (ending December 15).—1. "Preparatory Greek Course in English," from page 192 to 210.
2. "History of Cyrus," from page 144 to 289.
3. "Readings in Kitchen Science and Art," and "Glimpses of Ancient Greek Life," in *THE CHAUTAUQUAN*.
4. Sunday Readings for December 14, in *THE CHAUTAUQUAN*.

Third Week (ending December 22).—1. "Preparatory Greek Course in English," from page 211 to 232.

2. "History of Alexander," from page 1 to 168.
3. "Readings in Chemistry" and "Temperance Teachings of Science" in *THE CHAUTAUQUAN*.
4. Sunday Readings for December 21, in *THE CHAUTAUQUAN*.

Fourth Week (ending December 31).—1. "Preparatory Greek Course in English," from page 233 to 278.

2. "History of Alexander," from page 169 to 278.
3. "Greek Mythology," in *THE CHAUTAUQUAN*.
4. Sunday Readings for December 28, in *THE CHAUTAUQUAN*.

PROGRAMS FOR LOCAL CIRCLE WORK.

MILTON'S DAY DECEMBER 9.

"Truth is as impossible to be so led by any outward touch as the sunbeam."

Music.

Roll-call—Responses by quotations from Milton.

1. Essay A Brief Sketch of the Life of Milton.
2. Recitation Sonnet on his own Blindness.
3. Review of Milton's Works

[A brief outline of his principal works in both prose and poetry, including "Areopagitica," "L'Allegro," "Il Penseroso," "Comus," "Lycidas," "Paradise Lost," "Paradise Regained," "Samson Agonistes," given by different members of the circle, each member taking up only one production, and giving explanation and derivation of the name if necessary. In this way the whole class could acquire a good general idea of the field covered by Milton's works. Each one might be provided with a note-book and take down leading items as the others read.]

Music.

4. Essay—Milton's "History as connected with the Commonwealth and the Restoration."

Selections from Taine on Milton's "Adam and Eve." See reference given.

[These selections will afford amusement, and add spice to the entertainment.]

Additional subjects for essays: Milton's Early Home, Milton's Daughters, Milton's Wives, Milton on Divorce, Mary Milton, The Character of Milton, Milton's Times.

The following references will be found useful in gathering materials for essays: "English Literature," H. A. Taine, Vol. ii, page 240; the same, Vol. iii, page 249; Prose Writings, Vol. vi, p. 257; "Lives of Poets of Great Britain and Ireland," by Dr. Sam Johnson, p. 1; "Modern British Essayists," "Macaulay's Miscellanies"; the same, "Milton and Cowley," p. 116; Addison's Works, Vol. i, p. 143, a poetical criticism; Addi-

son's Works, Vol. i, p. 39, Milton's style imitated; Addison's Works, Vol. vi, p. 168, admirable notice; "Life and Poetical Works of Milton," published by Gregg, Philadelphia, Vol. ii; "English Literature," by G. L. Craik, LL.D., Scribner, New York; "Chambers's English Literature," Vol. i, p. 396; *Christian Examiner*, Vol. iii, p. 29; *American Church Repository*, Vol. ii, p. 153; *Contemporary Review*, Vol. xxii, p. 427; *Littel's Living Age*, Vol. cli, p. 323; *Unitarian Review*, Vol. xiv, p. 12; *Western Review*, Vol. v, p. 107; *Potter's American Monthly*, Vol. xiii, p. 45; *National Review*, Vol. ix, p. 150; *Congregational Magazine*, Vol. xvi, p. 193; "Land We Love," Vol. ii, p. 445; "Land We Love," Vol. iii, p. 38; *American Quarterly Observer*, Vol. i, p. 115; *American Quarterly Review*, Vol. v, p. 301; *United States Literary Gazette*, Vol. iv, p. 278; *Colburn's New Monthly Magazine*, Vol. cliii, p. 27; *Analytical Magazine*, Vol. xiv, p. 224; *Penny Magazine*, Vol. x, p. 97.

SECOND WEEK IN DECEMBER.

Music.

1. Quiz on the Readings of the Week.
2. Recitation.
3. Essay The Character of Cyrus.
Music.
4. Reading.
5. Essay What English Is.
6. Fifteen minute talk on Topics of the Times.
Social Converse.

THIRD WEEK IN DECEMBER.

1. Roll-call—Quotations from Readings of the Month.
2. Essay Demosthenes.
3. Reading Selections from the Philippians.
Intermission.
4. Essay The Effects of Intemperance.
5. Reading Greek Home Life.
6. Experiments in Chemistry.

MONTHLY PUBLIC MEETING.

Music—Chautauqua Song.

Roll-call—With Responses from Milton.
Introduction of New Members.

1. Quiz on the Month's Readings.
2. Essay The Story of Ulysses.
3. Recitation From the Iliad.
Music.
4. Essay Our Native Tongue.
5. Recitation From Il Penserooso.
6. Chemical Experiments.
7. Discussion—How can we improve our Circle and extend the C. L. S. C.?

HOW TO ORGANIZE A LOCAL CIRCLE.

BY REV. J. L. HURLBUT, D.D.

1. The first step is for somebody to get thoroughly saturated with the Chautauqua Idea, either at "the Mecca of us all," or some other Assembly, or by coming into contact with a live Chautauquan. Find out what the C. L. S. C. is, what it aims to do, and what it has already done in lifting up and inspiring people. Chautauqua Hand-book No. 2 will tell you something about its history and methods, and the C. L. S. C. number of the *Assembly Herald* will shed more light in the address of Dr. Vincent which it contains. But if you can get hold of the button hole of an intelligent leader of a local circle, in half an hour you can learn more of the working of the organization, than in a half-day of reading about it.

2. The next step is to awaken the interest of others in the subject. Talk about it in social conversation, especially with the busy people, who feel their need of just what the C. L. S. C. offers, an inspiration to and a helping hand in reading and thought. Send to the general office for a number of copies of the circular on "Popular Education," and distribute them where they will be appreciated and read. Let the Sunday-school teacher talk to his Bible class, the Superintendent to his school, the pastor to his congregation. Write an article for the village paper about the good work of the circle among the people. Secure the coöperation of the intelligent people in the community, the doctor, the lawyer, the editor, the principal and teachers of the public school, and let the town be awakened on the subject of the People's College. If these educated leaders fail to take interest, do not be discouraged, but go on and get up the circle among the few who will be aroused. We know of a place where the first circle consisted of six members; and now there are two hundred readers of the course in that city.

3. Bring together those interested in the subject to hold a meeting for the organization of a local circle. Do not limit the constituency to any one social grade. It will do good to both the banker and the plumber's apprentice, the society lady and the dressmaker, to meet on the common platform of an interest in one subject of thought. If the circle be started under D-dec

the auspices of a church, make room for members from other churches, for it does Christians good to look each other in the face and study together. The best place for the meeting is the big parlors of some warm-hearted householder who is in sympathy with the enterprise, and the closer the crowd the better the feeling is apt to be. Have on hand some Chautauqua Songs, and learn a few of the best. Shake hands all around, and try to make people acquainted.

4. At the meeting show a set of the books for the year's reading, and set forth the plan of the C. L. S. C. Then distribute the copies of the application blanks, and proclaim a recess, during which time the names of members will be received by a Secretary *pro tem.* [Obtain the blanks in advance of the meeting from the general office at Plainfield, N. J.] Two conditions of membership, in my judgment, should be named. First, that every member of the local circle should also be a member of the general C. L. S. C. "Associate members" have been the bane of many circles, for they are without responsibility; follow the course only so far as they feel an inclination, and are not true Chautauquans. You are uniting a company of people for a definite purpose of study, and no others should be admitted to membership. The second condition of membership should be, that each one joining shall take part as assigned in the meetings. If there is an implied distinction between members speaking and silent, between workers and listeners (who are apt to be critics), your circle will fail to accomplish its highest mission, to develop the dormant abilities of its members. The principles of the local circle should be "every student a member, and every member a worker," and it will be far easier to establish these as conditions at the outset than to work up to them afterward.

5. The second meeting should consist of members only, and those who come for the purpose of becoming members. At this meeting it may be desirable to prepare a simple set of rules, though it is not necessary, and an elaborate constitution and by-laws have crushed to death many societies. The better way is to make rules as you need them, and to change them as

circumstances may require. Let the leader or organizer bring to this meeting fifteen or twenty written or printed questions on the readings for the coming week or fortnight, and distribute them among the members, in alphabetical order of names, to be answered at the next meeting. A better plan, if practicable, is to print the program for the next meeting, with names of participants, by means of some duplicating process like the papyrograph or hektograph, and give a copy to each member. Assign your fifteen topics among the first fifteen names, so that all will be on an equality, but assign them with some regard to fitness, so that the most difficult question will not fall to the most untrained student.

6. The only officers needed are a president, vice-president, secretary and treasurer; and as everybody knows what their duties are it is not necessary to define them in a written constitution. Two committees may be chosen, each of which might consist of a single person. [Spurgeon says that the best

committee consists of three, of whom one is sick and another out of town.] One committee to prepare the program of the meetings, another to provide music, either vocal or instrumental, to vary the exercises.

7. The mention of a treasurer suggests that there may be small expenses to the circle, for secretary's book, postage, printing, etc. This may be obtained through voluntary contribution, through assessment, or through fines on absent members. In some circles it is obtained by making some person, generally the local bookseller, the agent to procure the books and receive subscriptions for the CHAUTAUQUAN. The members pay the agent the full price, of which he gives a certain percentage to the treasurer, thus supplying a fund upon which drafts may be made for necessary expenses.

These are our hints concerning organization. The local circle is now launched, and we give it the Chautauqua salute, wishing it a successful voyage.

THE LOCAL CIRCLE.

BY LEWIS C. PEAKE.

You say "There is no circle in my neighborhood." It may be so, but if you want one you may have it. If you desire to form one in a church (and if every church had a circle connected with it, its power would be immeasurably increased), get, if possible, the coöperation of the pastor. If you fail to secure his active assistance, as you very likely may, he will be pretty sure to give you his moral support and good will, without which little can be done in connection with any church. If, however, he can see his way clear to active participation, so much the better for the circle, as well as for himself. He has made another bond between pastor and people. If the proposed circle be in connection with a Y. M. C. A., get hold of the general secretary in the same manner and for the same reason. Wherever it may be, get, if you can, by private effort, one or two persons (as many more as possible) interested in the movement. Then, as near the first of October as possible, call a meeting of all interested in mental and moral culture, old as well as young, explain the object and aim of the C. L. S. C.; have blank forms of application for membership, and get as many as possible committed to it there and then. As a rule there need never be a failure. A large membership is not essential to success; indeed, much of the most satisfactory work is done in small circles of from four to a dozen members. Many a family circle has been blessed by being formed into a C. L. and S. circle.

A good deal of the success of a circle depends upon the person chosen as leader, conductor, president, or whatever name may be given to the chief executive officer; hence the importance of the question, who should occupy this position? The president should be the best person in the circle, be he man or woman; one of admitted preëminence among the members; one who is sufficiently interested to undertake and persevere in the study for its own sake, either to benefit himself or to enable him to help others, and not simply to patronize the Circle. The C. L. S. C. neither asks nor accepts patronage from any. The president should be a man of good general information and common sense. One who knows how to express himself in good plain Saxon, and when to stop. One who is regular and punctual in his attendance. A good conversationalist. One who will diligently pursue the course of reading, so that he may be in a position to *lead* the circle. If, in addition to these qualifications, he be a college trained man or a teacher, his power will be greatly enhanced. Get, if you can, one who through attendance at Chautauqua, has become thoroughly imbued with the spirit of the movement. Failing in this, do your best to induce him to go there next season.

Next to the office of president, that of secretary is the most

important in the circle. So much of the working of the circle depends upon this officer, that it is not easy to attach too much importance to the selection of a suitable person for the position. The president and secretary usually constitute the cabinet of the circle, hence the need of a perfect understanding between them. To this end frequent and easy communication is desirable. The secretary should be one capable, not only of keeping a fair and accurate record of the membership and business of the circle, but of suggesting methods for increasing the membership, adding to the comfort and convenience of those attending the circle meetings, etc.; a wide awake person with a great deal of thought for others.

In conducting your local circle, do not seek to use any stereotyped plan. That which has proved the best for some circles may not be so well adapted to yours. Study your surrounding circumstances, the habits and employments of the members, etc. One of the most satisfactory meetings I have known was held during the study of Roman History. The general subject was divided into two parts—B. C. and A. D. Each of these was again divided into Internal and External history, the former treating of the intellectual growth, laws, literature, etc., and the latter, of the wars, conquests and extension of the empire. The subjects were apportioned to four members who each occupied ten minutes, and a general discussion ensued. Where the circle is located in the vicinity of an educational institution, advantage may frequently be taken of the learning and teaching ability of some of the professors, many of whom would gladly render assistance in the matter, by delivering a lecture or teaching a lesson upon certain subjects under consideration. To this willingness on the part of eminent specialists to communicate freely from their store of knowledge, I gladly bear testimony. Get the members to prepare brief papers or criticisms upon certain phases of the subjects under consideration. These might be anonymous, if by that means some timid ones might be drawn out. Begin and close promptly on time. Sing the Chautauqua songs and persevere until all can and do sing them.

A good deal of interest might be awakened in the C. L. S. C. by steady effort. Furnish the local press with interesting items, accounts of circle meetings, an occasional paper prepared and read before the circle, etc. Editors are not dull; they will soon come to see that so far from patronizing you, they are really your debtors, and will give all the aid you reasonably ask of them. An occasional article in the religious weeklies will do good service, and such articles, brief and well written, will almost always command insertion. By all means cultivate the press. Circulate the Popular Education circulars

which, with forms of application, can be obtained in any quantities necessary from the head office. Send and give them to your friends. Talk about the circle. Be interested in it, and show that you are. Invite your friends occasionally to the circle meetings. The observance of the Memorial Days af-

fords fine opportunities for introducing the work of the circle to persons who have not given much attention to it. Best of all is to induce your friends to spend a week or two at Chautauqua in August, where the animus of the movement may be seen and studied as it can be nowhere else. This plan seldom fails.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God."—"Let us keep our Heavenly Father in the Midst."—"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

1. OPENING DAY—October 1.	10. SPECIAL SUNDAY—May, second Sunday.
2. BRYANT DAY—November 3.	11. SPECIAL SUNDAY—July, second Sunday.
3. SPECIAL SUNDAY—November, second Sunday.	12. INAUGURATION DAY—August, first Saturday after first Tuesday; anniversary of C. L. S. C. at Chautauqua.
4. MILTON DAY—December 9.	13. ST. PAUL'S DAY—August, second Saturday after first Tuesday; anniversary of the dedication of St. Paul's Grove at Chautauqua.
5. COLLEGE DAY—January, last Thursday.	14. COMMENCEMENT DAY—August, third Tuesday.
6. SPECIAL SUNDAY—February, second Sunday.	15. GARFIELD DAY—September 19.
7. LONGFELLOW DAY—February 27.	
8. SHAKSPERE DAY—April 23.	
9. ADDISON DAY—May 1.	

The local circle keeps warm and vigorous through the year the spirit of the summer assemblies. Indeed, to the local circles we believe we are indebted for much of the enthusiasm of the summer meetings. Their students garner rich harvests of thought and feeling in the long months of study, and the assemblies are but the meeting places to compare work, rest weary brains, gather fresh zeal and plan new undertakings. They are becoming necessary elements in the work. Students are feeling we must have an assembly. If we can not go to Chautauqua, we must have a local meeting. This feeling is leading to a great multiplication of centers. One of the latest plans we have learned of from the *Toronto Globe*, which says in a recent issue: "For some months past a few gentlemen have been quietly working to secure the control of the beautiful Oak Grove on the banks of the Niagara River, above the town, and near the famous old Fort George, as an assembly ground to be affiliated with the Chautauqua Literary and Scientific Circle, and also for general Sunday-school and temperance work. A deputation waited on Chancellor Vincent recently, and secured his hearty consent to coöperate, as far as possible, and aid the work in the direction indicated."

A new and delightful summer center for our work is promised by the active interest which the members of the local circle of OCEAN GROVE, N. J., are taking in extending their bounds. The circle is fortunate in having among its members Rev. J. L. Corning, director of the Department of History and Literature of Art in the Chautauqua University. Mr. Corning recently favored the circle with a most interesting article on the "Geography of Greece," showing how the peculiar configuration of the country had helped in forming its military and political supremacy, and had aided in developing the national individuality. The outlook of the circle Mr. Corning gives in a recent letter to the *Ocean Grove Record*, in which he says: "The Ocean Grove local circle of the C. L. S. C. in its new organization is yet in its infancy, being only a few weeks old. But it has already proved its calling to a noble mission as auxiliary to every appliance of religious and moral influence which in some sense is peculiar to this place. A most fortunate circumstance for its prosperity is found in the active sympathy of the resident officers of the Camp-meeting Association. Those honored men already divine the good work which the new agency contemplates, and have enlisted in it their cordial coöperation. Especially favored is our youthful organization in having my most valued friend, Dr. Stokes, for its presiding officer. He will bring to this auxiliary mission the same high qualities of mind and heart which have marked his successful administration as a guiding spirit in the noble religious works of the association. The duty and privilege of

securing personal membership in the Ocean Grove local circle of the C. L. S. C. can not be too strongly commended to the winter residents both of this and our neighboring town. To the young, especially, who need intelligent guidance, systematic habits and periodical inspiration in intellectual culture, this local organization will bring inestimable benefit. The Ocean Grove local circle of the C. L. S. C. is an organization with large possibilities before it. Its constituency need not necessarily be limited to the permanent residents of this highly favored locality, but may include as well, an unlimited auxiliary force from the thousands who gather on this hallowed spot during the summer. Upon the growth and work of this subsidiary organization will, in a great degree, depend the recognition which the great mother organization will have in the annual summer gatherings which have given Ocean Grove an enviable name all over our land."

In connection with these projected assemblies we have the pleasure of giving our readers an account of a local assembly which held its first session last summer. When we reported in October the local summer assembly at Lake Grove, Auburn, Me., we were not aware that another similar assembly had been held within the boundaries of the same state. It is, but recently that we have received the program of the Maine Chautauqua Assembly, the first session of which was held from July 23d to August 2d, at MARTHA'S GROVE, FRYEBURG, ME. The idea of a Maine Assembly originated with Mrs. Martha Nutter, a noble hearted woman of Cape Elizabeth, who wished to see the spread of the Chautauqua plan of study in Maine, and to have a permanent organization of the C. L. S. C. meeting once a year for a few days, something after the plan of the larger assemblies. At first it seemed that the movement would not be successful, but through the earnest efforts of Mrs. Nutter, assisted by Rev. John Collins, also of Cape Elizabeth, and Mrs. Stickney, of Brownfield, promises of lectures, readings, essays and music were obtained, programs were printed and sent out among the people. When the time appointed for the meeting arrived, July 28th, there was a goodly number of enthusiastic Chautauquans gathered at Martha's Grove. The entire program was successfully carried out, and the meetings lasted throughout the week. During the meetings a regular organization was formed under the name of "The Maine Chautauqua Union," officers were elected and a vote was passed to meet at the same time and place another year. No lovelier spot could be selected for such a gathering than Martha's Grove. There is a large growth of elm trees, which furnish a delightful shade, while beneath is a carpet of green, where a speaker's stand and seats are erected, and here are held nearly all the meetings. This grove borders on the Saco

River, and just across its banks is obtained a lovely view of Mount Kearsarge, while other peaks of the White Mountain Range are seen in the distance. A pleasant drive of two miles, past flourishing farms and through the lovely village of Fryeburg, and the station on the P. & O. R. R. is reached.

Quite as unique and delightful, though less ambitious, was a gathering which assembled weekly during the past summer at the PROFILE HOUSE, far up among the FRANCONIA MOUNTAINS of NEW HAMPSHIRE. It was formed early in August, by six of the waitresses of the hotel. They held their meetings sometimes in the quiet forests, sometimes in their rooms, and spent the two lovely months of August and September reviewing the readings of the year. It must have been a beautiful, inspiring hour, to the members of the little circle, when they would lay aside their duties, and under the trees of those lovely mountains turn their thoughts to their books.

Even Chautauqua itself keeps the germ of its power aglow through all the fall, winter and spring, by a local circle. From this center of centers a friend writes us of the life and work that has taken the place of the summer's study and enthusiasm. The pleasant letter gives a picture which our friends will enjoy, we believe, as well as we did. "You have seen a New England cellar banked up for winter? Then imagine the Amphitheater securely shut in by a five-foot tight board fence all round about. Something very precious must be stored there! Mayhap the seeds that shall next summer blossom into eloquence. Imagine all the Athenian watch-fire pillars, huddled into a corner of the Hall of Philosophy, like a shame-faced group of oriental women. Think of the Point, the docks, as absolutely silent; the lake without a sail, or even a row boat, save that of some solitary fisherman, drifting. Think of gathering nuts by the quart among the rustling leaves of the old Auditorium; of seeing the cottages stripped of their hand-painted decorations, 'Boarding and Rooms.' Two daily excitements still remain: the meatman's bell each morning rings, and the stage brings the one bag of mail at noon. The crowds seemed loth to leave this year, but the lingerers left in a body, and silence seemed suddenly to fall upon the place. There is settled down for the winter a genial, social company of live people, and it is evident that soon there will not be evenings enough in the week in which to accomplish all the delightful things the weeks will bring to enjoy. Indeed, this seems to me in several senses, a remarkable, a model, community. All social life centers in the little chapel. Here an enthusiastic C. L. S. C. meets each Tuesday evening, and each Sabbath at the vesper hour, the bell, whose echoes reach so far, calls an earnest company to the dear old hall."

Turning to our eastern circles, the first report of the month comes from the "Ashuelot" local circle of SWANZEY, N. H., which is still prospering, and has begun on its second year of work. "It is composed of thirteen regular members of the class of 1887, with eleven local members. Nearly all are diligent students and active workers. The Rev. Benjamin Merrill, one of the presidents of the New England class of '87, is an enthusiastic Chautauquan and member of our local circle. Our meetings are opened with prayer, and often closed with a Chautauqua song. At the opening each member repeats a quotation, and waits for the class to name the author if they are able to do so. At each meeting a portion of the required reading is assigned to each member of the class, as a special lesson for the next succeeding meeting. Both the regular and the local members are expected to prepare condensed reviews of the topics thus allotted to them, which are usually recited from memory. In order to give time for questions and remarks, each of these reports is limited to five minutes. The subjects considered often call out animated discussions, which are conducted in a friendly, conversational manner. A critic is appointed by the president at each meeting, to notice errors in language, and report at the close. The meetings increase

in interest, are instructive and entertaining, and the work done is thorough. We have been favored with some excellent essays and poems by members of the circle."

October 1st is the anniversary day of the C. L. S. C. of FRANKLIN, MASS., and this year their second anniversary was observed in a manner highly creditable to the circle, as it was also enjoyable to their friends. The exercises were listened to by an audience of nearly six hundred people, fully one hundred and fifty of them being Chautauqua students. By a generous outlay of money the circle secured the services of talented musicians from Boston and vicinity. They were also fortunate in securing the Rev. J. L. Withrow, D.D., the eloquent preacher of Park Street Church, Boston, to deliver their Commencement address. The topic selected by this eminent speaker was "The Intellectual Signs of the Times." It was a vigorous, instructive, and exceedingly entertaining address. The Franklin Circle has secured its publication in full, in the local paper of that town. A very interesting original poem, prepared for the occasion, was read by the author, the Rev. Wm. M. Thayer, of Franklin, the topic being "What is Thought?" The chapel was very beautifully decorated with the national colors, with deep-hued autumn leaves, and bouquets of choice flowers, arranged about the platform. The occasion was full of inspiration to the members and their friends, and opened in a very interesting manner the new year of the C. L. S. C. course. About twenty-five new members have enrolled themselves upon the books of this circle, as members of the class of '88.

After the Assembly at South Framingham, an evening was spent in the church at WEST CHELMSFORD, MASS., on the Chautauqua Idea, the result of which was a local circle consisting of twelve members, nine of whom are regular members of C. L. S. C., of the class of '88. All are enthusiastic over the studies. The circle meets twice a month, following somewhat the order of exercises suggested in *THE CHAUTAUQUAN*.

We learn from the *Palladium*, of NEW HAVEN, CONN., that the first fall meeting of the "Woolsey" circle, composed of members of the "Pansy Class," was held on the evening of October 15th. The members witnessed some very interesting experiments in chemistry by James D. Whitmore, of the high school. Wr. Whitmore expressed his hearty sympathy in the C. L. S. C. organization, and any similar movements calculated to elevate young or old in searching for knowledge. In a very pleasing way he made all who were present feel perfectly unrestrained, frequently requesting them to gather close around him and the table, that they might the more perfectly witness the results of his experiment. The "Woolsey" circle has now entered upon the second year of its course of reading, and has increased its membership from twenty-eight to forty-two.

A second local circle was organized in PAWTUCKET, R. I., on September 29th. It has taken the name of the "Pleasant View Local Circle," and counts sixteen regular members, beside several "locals." A report of methods, plans, and special work, we trust, will soon come from these new friends. They may be sure that they have a hearty welcome from all members of the C. L. S. C.

This fall, after three years of hard work in the C. L. S. C., the little circle of ladies at ONEIDA, N. Y., entered upon their senior year. During the past term of their reading they have held weekly meetings at the homes of the members, rarely in all this time missing an evening. These gatherings have been informal and home-like, but withal very thorough. Their plan has been to read aloud, criticising carefully every point in the reading—an excellent plan, and one which does much to make good the sentiment which they write us that they heartily believe in: "Trifles make perfection, but perfection is no trifle." Lively discussions often arise over some point of their reading, and do much toward strengthening their interest. They report that during their course they have observed nearly all of the Memorial days—an excellent plan, and one which al-

ways compensates in the ideas and inspiration which it gives, for the extra work it may cause.

There is a circle at WELLSVILLE, N. Y., that has the rare honor of having been in successful operation since 1878. They have graduated members in the classes of '82 and '83, and now number nineteen members, representing each of the four classes. A friend writes of their last annual reunion: "The last of August we held our annual reunion, which has been usually held at the home of some member, but this year, as last, was made a surprise; we succeeded so perfectly in this as to have our coming only made known by our hearty singing of

"Hail the day with joy and singing,
Swell the chorus, full and ringing,
Love to Alma Mater bringing—
All hail! C. L. S. C."

"Our repast was bountiful, and the decorations were worthy the loving hands that arranged them. We sat long at the table, and gave the time more to song and toast than to food. These reunions are so enjoyable that I think their fame is causing many in our town to feel that it would be very pleasant to be numbered with us. One of the '82 graduates is pursuing his third year at Wesleyan University, and his presence at these reunions adds to our pleasure."

From JOHNSTOWN, N. Y., the secretary writes us that on October 1st the circle was reorganized, and the officers for the year elected.

For two years the "Clinton" circle of NEWARK, N. J., has been quietly but seriously working. On the 14th of October it began its third year's work. Of the plans which have governed them each year we have a brief outline: "We endeavor to amuse and profit ourselves by embracing as great a variety of general lines in our programs as possible; for example: Our first president, a C. L. S. C. graduate, made our meetings especially attractive by illustrating the lessons in geology with maps, engravings, fossils, ores, etc., and bringing 'the heavens near by' with blackboard and crayon. Our second year president fostered and developed the question-box idea, and encouraged the preparation of original papers. This year we hope to make famous with special exercises *in memoriam*, lectures, glees, quotations, and question matches." At the meeting of the circle on October 30th, among other happily chosen exercises was a talk on "Europe" by a cultured traveler from their circle, who has lately returned from a trip abroad.

The chemistry in this year's course is going to prove a most delightful part of the year's reading, affording, as it does, such ample opportunity for interesting experiments. One of the first circles to report their work in this line is the "Parker Circle" of WASHINGTON, D. C., of which the *Evening Critic* of that city says: "'Parker Circle,' C. L. S. C., has taken up the work of the year with increased vigor, the meetings being well attended and very interesting. A special meeting was held last evening at the residence of the president, A. P. Steward, to give opportunity to the members to witness some experiments in chemistry, a portion of the required reading of this year's course being upon this interesting subject. The experiments were conducted by Mr. W. T. Criswell, chemist. Hydrogen and oxygen gases were successfully generated, hydrogen soap bubbles blown and then exploded by igniting them, recently extinguished tapers relighted by oxygen, sodium and potassium burned on water, arsenic and antimony tests made, etc., etc. Only one slight explosion occurred, which caused much amusement, but no harm resulted except to the test tube, which was blown to atoms." The plan of the "Parker" circle in securing a practical chemist to conduct their experiments is wise. There is always more or less danger in operating with gases, and we earnestly recommend circles who wish to see these beautiful experiments to engage the services of some one skilled in laboratory work.

A neighbor to the "Parker" circle is the "Pansy" circle of

our national capital. We have received from this circle a poem lately written in its honor, from which we extract the following verses:

Beside the lake, in simple grace,
Alma Mater sits serene
And gathers in her kind embrace
The children she has never seen.
Through the broad continent they dwell,
Some, hungry minds, else unsupplied—
Some, who have drawn from learning's well
But still would dip, unsatisfied.
Anear or far, we feel her hand;
Her guiding counsel shapes our "course,"
Her sympathy unites our band;
Hers the unseen cohesive force.

The "Circle's" brightest Jewel, thou,
Fair Mother! To whate'er thou bidst
With prompt obedience we bow,
But "Keep our Father in the Midst."
Here, on the Circle's southern edge,
Responsive to thy guiding nod,
We, faithful to our earnest pledge
"Study the Word and Works of God."

We may not rise to eminence and fame,
We may not win, but may deserve success;
Beneath the shadow of an humble name,
We may live on our little world to bless.
As our bright pansy from its lowly stem
Smiles almost human cheer to eyes that see,
We'll brighten each our little niche for them
To whom it matters what our life should be.
We'll learn where hoarded gems of clearest ray
Lie hidden close in pure and noble books
And lead still other feet in learning's way,
To gather wealth in these rich-dowered nooks.

Not for ourselves alone we con our task;
Chautauqua owns no selfish miser churl;
Where her fair lake's sun-lighted waters bask,
True knowledge is no guarded, hidden pearl.
We only hide the drudgery from view;
To social cheer transform the study's gloom;
In mutual converse pierce the sunlight thro'
And cover sternest themes with Pansy bloom.
Then rally round Chautauqua's banner bright!
And win to wisdom all who will be won!
Still looking upward for the one Sure Light,
True, loyal Pansies, turning to the Sun!

It is a great pleasure to hear from circles who have been steady workers for some time, but have never sent us reports. Such a bit of circle-history comes to us from ROOTSTOWN, OHIO. A friend writes: "We organized a circle October, 1882, with a membership of twenty, and surely a good report is due the circle for the two years' work they have done. The benefit received has been many fold, the discipline obtained by having a certain course of reading to pursue has already been perceptibly felt. A taste for the better class of reading has been cultivated, and a feeling of sociability gained among the young people, brought about by common interests. As we are ready to start in with our third year's reading, all our former members will not respond at roll-call. During last year, we, as a class, were very much bereaved by the loss of our former president, Mrs. H. O. Reed, who was untiring in her efforts to organize the circle here, and who happily presided over our meeting for the first year, always entertaining the class at her own home. She was the first of our number to pass through the 'Golden Gate' at Chautauqua, graduating August 1883. The following December, on Christmas day, her spirit passed

through the 'Golden Gate' to join the great 'Circle' of the redeemed above. We have been so fortunate as to have three clergymen belonging to our order, one, who graduated with the class of '84. Our regular meetings have been opened with singing, prayer, and scripture reading. The specified memorial meetings have generally been observed. The programs have been arranged by a committee, and have consisted of roll-call, responded to by quotations from authors specified, followed by articles prepared on topics connected with the subjects we were reading, after which a poem was generally read. The last hour we have devoted to miscellaneous topics and the questions in *THE CHAUTAUQUAN*. During the latter part of '83 we had a Round-Table which we found very interesting."

How many stories of wit and wisdom find their center at Chautauqua. One of the most entertaining we have seen comes from a member of the DETROIT, MICH., local circle, Mr. G. F. Beasley, a lawyer of that city, and bears the title of "John Scroggin's First Visit at Chautauqua." It is a bright and real description of the first visit of a farmer and his sturdy boys and girls to Chautauqua, of their funny mistakes, their gradual appreciation of the "Idea," and finally their complete metamorphosis into typical Chautauquans; for at last

Farmer Scroggins was delighted
When he saw, in one united,
Sport and culture for the millions such as he,
When he saw his children prying
Into things he rarely scanned;
When his house became a college
Where his children gathered knowledge,
And that books and apparatus were in very great demand.

Books were mingled with their pleasures,
Curious eyes were open wide;
Problems found a quick solution,
Telling words found elocution,
And they coaxed and coaxed and toasted him beside.

We should like to give all of the story, had we space, yet does not nearly every member of the C. L. S. C. know a John Scroggin who, under the influence of our magic *alma mater*, has seen "his house become a college?" It is, we believe, a familiar story not only in Detroit, but in Maine, California, and Texas.

There are two important circles in DETROIT. The "Pansy Circle," of which Mr. J. W. Green, a graduate of '83, is president, numbers twenty-seven members. They hold their meetings at the home of the president meeting weekly on Monday evening. The president and his wife are very enthusiastic over the C. L. S. C., and are well adapted to fill the important offices to which their club has elected them. From the president of the "Central" C. L. S. C., of the same city, we have received a most entertaining record of the past year's work. "The circle began the year of '83 and '84 with a membership of forty-eight. The first regular meeting was held at the Conservatory of Music, September 19, when the officers were elected. We now have enrolled the names of seventy paying members, twenty-six of whom are members of the general Circle. The circle has held forty-one regular meetings, two of which were spent in listening to very interesting lectures by Professor Winder. The evening of January 24 was spent debating the "Free Trade" question. February 21 Rev. Dr. Reilly lectured for the circle on "Christian Evidences Historically Considered." May 29 the circle debated the "Indian Question." During the year we have given four entertainments, and one reception. The latter was given in honor of Dr. Vincent, on September 24, at the residence of our president. The William Cullen Bryant Memorial Day was celebrated November 2, 1883. It was a very enjoyable entertainment, consisting of readings from Bryant, with music interspersed, followed by an elegant collation. The second Milton evening was spent very pleasantly at the home of our vice

president. The C. L. S. C. met to celebrate Longfellow's birthday. The program comprised readings, several tableaux and music, after which refreshments were served. The Shakspere entertainment, given at the Conservatory of Music, was one of the most pleasant of the series, many members were present, the selections were finely rendered, and the music was unusually good. The commencement exercises were held at Conservatory of Music, July 2. I will let the reports which were in the papers give you the description: "The Chautauqua Literary and Scientific Circle closed their season last Wednesday evening at the Conservatory of Music. The attendance was large and the program one of unusual excellence. The "Class History," by Mrs. Gillett, was a pleasant record of the doings of the society the past year, and was bright and well written. An address by T. D. Hawley, covering the existence of the circle, and a beautiful tribute to the late Mrs. Clark, the first president, was one of the noticeable features of the evening. A prophecy by Miss Todd was highly amusing and full of local hits. The music was especially good, both vocal and instrumental. A fantasie on the zither and violin by Mrs. Boyle and W. J. Kohlaas was rapturously received."

There is a great deal due to the president of a circle. An energetic president will make a live circle. We do not wonder that at PENDLETON, IND., the membership has increased twenty-five per cent., and that there was never such a manifestation of zeal and determination. Their president, Dr. A. S. Huston, puts life and skill into whatever he does. We hope to receive an extended report from Pendleton in the year.

No more systematic plan of work has come to our notice this year than that which we have received from the Alpha circle of QUINCY, ILL. This circle began its fall's work by celebrating Garfield's day; again on opening day, October 1, they met, elected officers and received new members. The circle, when reorganized, numbered about twenty-four members. They seem to have all the necessary elements for success—a large and live membership and an energetic president, of whom they write: "He is nothing less than a living library." Their meetings are held each week. The weekly printed program cards contain the mottoes, the outline of study for each week, and the exercises which are arranged for each evening. We notice that they made the experiments in chemistry, and they write us that they had splendid success with them. The exercises are enlivened by music, and the Chautauqua songs stand prominent. The plan recommended in *THE CHAUTAUQUAN* for October—a pronouncing match on Greek names—was one of the features of a joint meeting of the Alpha and Beta circles on the last week of October; they write that it was hugely enjoyed. In order to help the participants in this "match" the back of the programs contained a key compiled for the Quincy circles, on how to pronounce classic names, giving rules for accent, syllabication, and sounds of the letters.

A friend who caught her inspiration for the C. L. S. C. work at Chautauqua itself, and who has induced several members to join the ranks, writes us of a new circle of eighteen members at TONICA, ILL. An excellent feature of this circle is that though three of its members are to graduate in '86, while the remainder are all new members, yet there is a delightful spirit of unity in the work. All doing the same, reading irrespective of class distinctions, makes the local circle possible, and promotes a fund of good feeling and co-operative study, otherwise impossible. The circle at Tonica has only just started, and, of course, as yet has no plan of work to report. No doubt, as is generally the case with our Illinois friends, they will soon send us accounts of happy plans and successful work.

The reports which MARSHALLTOWN, IOWA, send are frequent and always encouraging. The president writes: "Our circle would like to let the rest of the Chautauqua world know

that we are still engaged in the good work. The 'Alden' circle, which met last year as two divisions of the same circle, this year adds twenty or more names to the class of '88, and has organized as two separate circles. The evening circle retains the name of Alden. The new circle (formerly the afternoon division) has adopted the name of 'Vincent,' and has twenty-eight names recorded. The old members are glad vacation is over and the new ones take up the work with enthusiasm. October 14 the two circles celebrated the beginning of a new Chautauqua year by a grand banquet, which passed off very pleasantly.

It is of great value to the C. L. S. C. to have the support of the local press. In no other way can so much and so effective work be done. A circle which lacks the will to extend its boundaries, and which selfishly is content with "our set," can not reap the full benefit of our work. We need to take in others, to be always open to receive members, and to employ the best means to make ourselves and our hospitality known. The local paper is the best medium for this. Many of our friends have proven this so, among them the Chautauquans of Dr. Soro, Mo., who send newspaper announcements of two meetings recently held, giving their program and entertainments, and cordially inviting others to join them. The effect can not but be good. The program which they offer recommends itself to every reader as meaning serious study and genuine culture, and the hearty summons to come and join them proves a catholicity of spirit even more desirable than culture.

In the neighboring state of KANSAS, at WILLIAMSBURG, the circle has followed a similar plan. They publish in their local papers a review of the extent of the C. L. S. C. work, describe its methods, and then call attention to their own goodly com-

pany of forty members, who are all anxious to receive cordially any one who may desire to undertake the reading. The Williamsburg circle holds monthly public meetings and does the work of the month through the medium of sub-circles, which meet more frequently—a plan which in several large circles we have known to work admirably.

The Invincibles who make up the Longfellow circle of NEW ORLEANS, LA., entered upon their four years' work in October. A friend has kindly given us an account of the work the members did during the summer months: "The summer circle was very pleasant; the C. L. S. C. studies not extending through the summer months, they were thrown on their own resources for a program. They read regularly from Emerson and Ruskin, also extracts from Hamerton's, 'Intellectual Life,' Carlyle, and Dr. Holland, with a bit of poetry now and then. You see they are not starving, but eating 'strong meat.' In October the circle began the regular readings. Now, when you remember that though our thermometer runs along in the nineties for weeks at a time, and that though floods, epidemics and mosquitoes interfere with steady work, these people have gone bravely through three years, and have done thorough work, you will not wonder that I am proud of my children."

WYOMING TERRITORY sends notice of a new organization of the C. L. S. C. at EVANSTON, called the "Unita Local Circle." The circle was started October 7, and officers—two only, president and secretary—were elected. The spirit of the circle they sum up in the following concise and suggestive sentences: "Enthusiastic devotion to the 'Chautauqua Idea.' Plain informal meetings for mutual questionings, recitations to each other, map studies, and practical application of new truths taught, as per example, 'Resolved, to try every method given for cooking the potato.'"

THE C. L. S. C. CLASSES.

CLASS OF 1885.

"Press on, reaching after those things which are before."

OFFICERS.

President—J. B. Underwood, Meriden, Conn.

Vice President—C. M. Nichols, Springfield, Ohio.

Treasurer—Miss Carrie Hart, Aurora, Ind.

Secretary—Miss M. M. Canfield, Washington, D. C.

Executive Committee—Officers of the class.

Class badges may be procured of either President or Treasurer.

The price of our *Class Badges* is ten cents each.

The price of '85 class paper is fifty cents per box, to be obtained of Mr. Henry Hart, P. O. Box 176, Atlanta, Ga.

The office from which the class has been obtaining their badges has been entirely burned out, and the design of our badge perished with the other contents. We now expect to have a copy of the original design within two weeks, and to be able to furnish more badges by December 1st. It is gratifying to know that the demand for the Lavender has largely increased this fall. This indicates a growing interest in the C. L. S. C. studies this season.

In order that an estimate may be made of the members of '85 who will take their diplomas at Chautauqua next summer, it is desired that all expecting to be there will forward their names to the secretary, Miss M. M. Canfield, Treasurer's Department, Third Auditor's Office, Washington, D. C.

This pleasant testimony to the pleasure of class associations at Chautauqua many an '85 will welcome. It is taken from a letter on Chautauqua which Mr. Underwood has received: "A very pleasant feature of Chautauqua is the pleasant associa-

tions, and especially is this the case among the members of the C. L. S. C. A bond of mutual sympathy exists between them. Reading the same books, with the same object in view, mind and heart culture, it is no wonder that they are a congenial company. There I felt a special pleasure. There are so many, many things to be said in favor of Chautauqua that I feel I have very imperfectly expressed them. The meeting of old friends and finding of new ones contributed another of my pleasant impressions. The recreation afforded by its lovely lake, its health and rest-giving facilities, its elevating influence in every way, have won for it well-deserved fame. My Chautauqua visit will afford me pleasant memories during the coming years, and if permitted, I hope to repeat it next year, and one event I shall look forward to with pleasure, will be the meeting again of our class of '85.

"Very respectfully yours,

ELLA HOLM."

CLASS OF '86.

"We study for light, to bless with light."

CLASS ORGANIZATION.

President—Rev. B. P. Snow, Biddeford, Maine.

Vice Presidents—Rev. J. C. Whitley, Salisbury, Maryland; Mr. L. F. Houghton, Peoria, Illinois; Mr. Walter Y. Morgan, Cleveland, Ohio; Mrs. Delia Browne, Louisville, Kentucky; Miss Florence Finch, Palestine, Texas.

Secretary—Rev. W. L. Austin, Dunkirk, New York.

The class of '86 feels that it may exercise a little just pride in the fact that it enters upon its third year with a good 14,000 members, characterized, especially, by earnest, studious application to the work of the course. The class mean to be true to their name, the "Progressives," and they hope that noise and show may not be the only signs they may give of prog-

ress. They trust that '86 will not fail to make good and continue to maintain the strong and honorable place it now holds as a corps of the great C. L. S. C. army.

It will interest the whole membership of '86 to know that Principal Fairbairn, of England, the distinguished lecturer on Philosophy this season at Chautauqua, accepted with great satisfaction, an election as honorary member of '86, and entertains the warmest interest in his class.

Two who have won names in song are among our regular members, and have been elected class poets. One is the author of "No Sect in Heaven," the other has written admirable verses for THE CHAUTAUQUAN, and for other publications. One honored and earnest member, Professor C. C. Case, will in due time set to music some of the poetic utterances of these writers as class songs for '86.

A special monogram note paper has been prepared for the class of '86. It is much admired.

We are pained to record the death of our class-mate, Mrs. Lorica Bennett, of Gilmore, Iowa. Her devotion to the C. L. S. C. had for a long time been intense, and one of her last requests was that her testimony to its benefits be added to the list of those which appear in THE CHAUTAUQUAN.

THE CLASS OF 1888.

All items of interest pertaining to the class of 1888 should be sent to C. C. McLean, Jacksonville, Florida.

We are in receipt of a letter from Professor Walton N. Ellis, Chairman of Motto Committee, notifying us that the selection made is "Let us be seen by our deeds," from the Latin *spectemur agendo*.

QUESTIONS AND ANSWERS.

CYRUS THE GREAT AND ALEXANDER THE GREAT, AND "PREPARATORY GREEK COURSE IN ENGLISH."

BY A. M. MARTIN,
General Secretary C. L. S. C.

FIFTY QUESTIONS AND ANSWERS ON HISTORY OF CYRUS THE GREAT.

1. Q. How has the conquest of Cyrus been characterized? A. As the starting-point of European life.

2. Q. As an individual, of what does Cyrus stand out as the representative? A. Of the East.

3. Q. Of what empire was he the founder? A. The Persian empire.

4. Q. Where was the Persian empire situated? A. In Asia, between the Persian Gulf and the Caspian Sea.

5. Q. At what date did the Persian empire attain to great magnificence? A. About five hundred years before Christ.

6. Q. Contemporaneous with the Persian empire what republics flourished in the West? A. The republics of Greece.

7. Q. What two Greek historians have given us the history of Cyrus? A. Herodotus and Xenophon.

8. Q. How did Herodotus obtain his information for writing his history? A. By visiting the countries about which he wrote.

9. Q. What romance did Xenophon write, founded on the history of Cyrus the Great? A. The "Cyropaedia."

10. Q. Why may we assume that much Xenophon says about Cyrus is fiction? A. His narrative was apparently written for the purpose of conveying lessons in philosophy, morals, and military science, rather than that of stating historical facts.

11. Q. As what kind of a person does he portray Cyrus? A. As a model hero.

12. Q. What six empires or countries are specially associated with the life of Cyrus? A. Media, Persia, Lydia, Babylon, Judah and Scythia.

13. Q. When was Cyrus born? A. About six hundred years before Christ—B. C. 599.

14. Q. At the time of his birth who was king of Media? A. Astyages.

15. Q. Who was the king of Persia at this time? A. Cambyses.

16. Q. Whom did Cambyses marry? A. Mandane, the daughter of Astyages.

17. Q. What son was born to them? A. Cyrus.

18. Q. By reason of his dreams what did Cambyses fear? A. That Cyrus would usurp him.

19. Q. To whom did he give orders to have Cyrus destroyed? A. To Harpagus, an officer of his court.

20. Q. To whom did Harpagus deliver the child Cyrus, with orders to have him left in the forest and destroyed? A. A herdsman, Mitridates.

21. Q. What did Spaco, the wife of Mitridates, persuade her husband to do? A. To substitute Cyrus for her own dead child, and to expose the latter in the forest.

22. Q. About what age was Cyrus when he was discovered by his grandfather and restored to his mother? A. About ten years of age.

23. Q. What revenge did Astyages take upon Harpagus for not carrying out his instructions to have Cyrus destroyed? A. He made a feast to which he invited Harpagus, and after giving him of the flesh of his own son to eat, displayed to him his mutilated remains.

24. Q. In what manner did Harpagus seek to revenge himself against Astyages? A. He plotted the overthrow of his government by fostering discontent at home, and inciting Cyrus to attempt the conquest of his grandfather's kingdom.

25. Q. When Cyrus made the attempt what was the result? A. Astyages was defeated, and Cyrus was established on the throne of the united kingdom of Media and Persia.

26. Q. What prominent empire or kingdom existed in Asia Minor at the time of Cyrus, of which Croesus was the king? A. Lydia.

27. Q. For what was Croesus celebrated? A. For his great wealth.

28. Q. With whom did Croesus ally himself and attempt the conquest of the Persian empire? A. With the Lacedaemonians.

29. Q. When the two armies met at Pteria, in the eastern part of Asia Minor, what was the result of the battle that ensued? A. The conflict was continued all day, and at night each army withdrew from the field.

30. Q. What did Croesus do after the battle? A. Thinking Cyrus was repulsed he returned to Lydia for fresh recruits, dismissing his army on the way, intending to renew the invasion in the spring.

31. Q. What course did Cyrus pursue? A. He followed after Croesus, and forced him to renew the contest under the walls of Sardis.

32. Q. What did Cyrus oppose to the cavalry of Croesus? A. His transport camels.

33. Q. What was the result? A. The camels threw the cavalry into confusion, and Croesus met with overwhelming de-

feat, which was soon followed by the capture of Sardis and the taking of the king prisoner.

34. Q. What great empire in Asia was yet unconquered by Cyrus? A. Babylon.

35. Q. What river flowed through the city of Babylon? A. The river Euphrates.

36. Q. Who was king of Babylon when Cyrus attempted its conquest? A. Belshazzar.

37. Q. In what manner did Cyrus capture the city? A. He turned the Euphrates from its course, and marching his army by the dry bed of the river under the walls, surprised Belshazzar at a feast, and gained full possession of the city.

38. Q. To whom does the Bible narrative attribute the taking possession of Babylon? A. To Darius the Mede.

39. Q. How can this apparent contradiction be explained? A. On the probable theory that Darius held the sovereignty as the viceroy of Cyrus.

40. Q. How has a recently discovered inscription confirmed the truth of the Scripture narrative that Belshazzar was the king of Babylon at the time of its capture, although authorities in secular history give the name of Nabonnedus as the king? A. By proving that Nabonnedus, during the last years of his reign, associated his son, Bil-shar-uzur—which name is shortened to Belshazzar—with himself in the government, and allowed him the royal title.

41. Q. At the time of the capture of Babylon who were in captivity there? A. The Jews.

42. Q. How many years after the captivity did the restoration of the Jews to Jerusalem take place? A. Seventy years.

43. Q. One year after the taking of Babylon what proclamation did Cyrus issue? A. A proclamation allowing the Jews to return to Jerusalem, and rebuild their city and the Temple.

44. Q. After the conquest of Babylon of how large a territory did Cyrus find himself the sovereign? A. Nearly all of then known Asia.

45. Q. About how many years had he been engaged in these conquests? A. About thirty years.

46. Q. What northern tribe did he now try to conquer? A. The Massagete, one of the Scythian nations.

47. Q. By whom were they governed? A. By a queen named Tomyris.

48. Q. What was the result of the expedition? A. The Persian army was almost wholly destroyed, and the body of Cyrus was found among the slain.

49. Q. Who succeeded Cyrus to the throne of the Persian empire? A. His son Cambyses.

50. Q. What difficulties are experienced in tracing the connection between the secular history of the Persian domination and the narrative of the same epoch as given in the Bible? A. The proper names used to designate the same person are different in the secular and in the sacred histories, and the best scholars are not agreed in identifying the two.

II.—QUESTIONS AND ANSWERS ON THE HISTORY OF ALEXANDER THE GREAT.

51. Q. In what year was Alexander the Great born? A. In the year 356 B. C.

52. Q. At what age did he commence, and at what age end his career? A. He commenced when about twenty years old, and died at thirty-two years of age.

53. Q. Where was his native country? A. On the confines of Europe and Asia.

54. Q. What were some of the characteristics of the Asiatic civilization? A. Wealth and luxury; vast cities and splendid palaces; and enormous armies, magnificently equipped.

55. Q. What were some of the characteristics of the European civilization? A. Energy, genius and force; strong citadels and military constructions; and compact bodies of troops, thoroughly disciplined.

56. Q. What were the names of Alexander's father and mother? A. Philip and Olympias, the latter being the daughter of the king of Epirus.

57. Q. What great philosopher had charge of the education of Alexander? A. Aristotle.

58. Q. In what great battle did Alexander take part, when eighteen years of age? A. The battle of Chæronea.

59. Q. What befall Philip, the father of Alexander, at the celebration of the wedding of his daughter? A. As the military procession was moving toward the theater he was stabbed to the heart by Pausanias, an officer of the guard, and immediately expired.

60. Q. At the time of Philip's death what great expedition had he been planning? A. An expedition into Asia.

61. Q. What did Alexander, as successor to Philip on the throne, determine as to this projected expedition? A. To carry it out as designed by his father.

62. Q. How large an army did he have when he at length marched into Asia? A. Thirty-five thousand men, five thousand being cavalry.

63. Q. At what place did Alexander first encounter the Persian army, and in how large force? A. At the river Granicus. The Persian force is stated to have been from two to six hundred thousand.

64. Q. What was the result of the battle? A. The army of Alexander crossed the Granicus in the face of the enemy, and entirely routed the Persian army.

65. Q. After marching further into Asia, who advanced to meet him? A. Darius, the king of Persia, with a vast army, equipped in great splendor.

66. Q. Where did the hostile armies meet, and how did the battle that ensued result? A. On the plains of Issus. The Persian army was defeated and routed, the king saving himself by precipitate flight.

67. Q. Where did Alexander meet his first obstruction in his march along the eastern shore of the Mediterranean? A. At the great and powerful city of Tyre.

68. Q. What followed the taking of Tyre by Alexander, after a long siege? A. The slaughter of the inhabitants, and it is said that Alexander crucified two thousand of them along the seashore.

69. Q. Into what country did Alexander soon after march, and what city did he there found? A. Into Egypt, and founded the city of Alexandria.

70. Q. After again returning to Asia, where did Alexander encounter the Persian army, and with what result? A. On the plain of Arbela, where fifty thousand men under Alexander defeated and routed the army of Darius of from five hundred thousand to a million men, leaving the bodies of three hundred thousand of the slain on the field.

71. Q. To what three cities did Alexander now march that surrendered on his approach? A. Babylon, Susa, and Persepolis, the capital of the Persian empire.

72. Q. To what position did Alexander now find himself elevated, at the age of twenty-six? A. To the summit of his ambition. Darius was dead, and he was the undisputed master of western Asia.

73. Q. For the following two or three years where did Alexander continue his expeditions and conquests? A. In Asia, meeting with a great variety of adventures.

74. Q. After his return to Babylon from an expedition into India how did he spend his time? A. In forming vast plans one day, and utter abandonment to all the excesses of dissipation and vice the next.

75. Q. What was the immediate occasion of his death? A. A prolonged carousal was followed by a violent fever, which soon terminated fatally.

76. Q. What became of the empire of Alexander after his death? A. It was for many years subjected to protracted civil wars, which resulted in its separation into numerous small kingdoms.

III.—QUESTIONS AND ANSWERS ON "PREPARATORY GREEK COURSE IN ENGLISH," FROM PAGE 172 TO END OF BOOK.

77. Q. Of what is the most famous passage in the Sixth Book of the "Iliad" descriptive? A. The parting of Hector and Andromache, his wife, bringing with her their little child.

78. Q. Who among the Greeks takes the honors of the seventh book of the "Iliad"? A. Ajax.

79. Q. What constitutes a prominent feature in the eighth book of the "Iliad"? A. Another account of the Olympian gods in council.

80. Q. Technically described, what is Homer's verse? A. Dactylic hexameter.

81. Q. What is a dactyl? A. A foot of three syllables, of which the first is long and the other two short.

82. Q. In dactylic hexameter how many of these feet are there in a line? A. Six.

83. Q. Name a classic English poem written in dactylic hexameter? A. Longfellow's "Evangeline."

84. Q. What does the "Odyssey" mean? A. The poem of Odysseus, or Ulysses, king of the island of Ithaca.

85. Q. When Troy was taken for what place did Odysseus and his followers sail? A. Ithaca.

86. Q. On their way, to what land were they driven? A. That of the Cyclops, a savage race of one-eyed giants.

87. Q. Here, what did Odysseus do to the Cyclop Polyphemus? A. He put out the one eye of the monster, after he had eaten six of the hero's comrades.

88. Q. What did Poseidon, the god of the sea and father of Polyphemus, do in revenge? A. He doomed Odysseus to wander far and wide over the sea to strange lands.

89. Q. When the "Odyssey" begins, ten years after the fall of Troy, where is Odysseus? A. In the island of Ogygia, at the center of the sea, where for seven years the nymph Calypso has detained him against his will.

90. Q. Meanwhile, what has befallen Penelope, the wife of Odysseus, in Ithaca? A. She has been courted by more than a hundred suitors, lawless, violent men, who feast riotously in the house of Odysseus as if it were their own.

91. Q. When Odysseus at length gets permission to sail from Ogygia, and starts on a raft, what occurs to him? A. Poseidon wrecks his raft, and he is thrown upon the island of the Phaeacians, a rich and happy people near to the gods.

92. Q. Upon being entertained by the king of the Phaeacians, what are the subjects of some of the adventures he relates? A. The enchantress Circe, the sweet singing Sirens, and the passage between Scylla and Charybdis.

93. Q. After Odysseus is taken back to Ithaca by a Phaeacian crew, what is the fate of the suitors of Penelope? A. They are all slain in the palace by Odysseus, assisted by his son Telemachus and two trusty servants.

94. Q. What are some of the most noted translations of the Odyssey? A. Chapman's, Pope's, Cowper's, Worsley's, and Bryant's.

95. Q. What part of the adventures of Odysseus does our author first give in an extended quotation from Worsley's translation of the "Odyssey"? A. His stay in the country of the Phaeacians.

96. Q. What was the name of the king of the Phaeacians, frequently referred to in poetry containing classical allusions? A. Alcinous.

97. Q. Of what is the next extended quotation descriptive that is given by our author from Worsley's translation of the "Odyssey"? A. The slaughter of the suitors of Penelope by Odysseus and his son.

98. Q. Of what are the remaining quotations given descriptive? A. Odysseus making himself known to Penelope, his wife, and to Laertes, his father.

99. Q. Who now intervenes to avert further bloodshed? A. Athene.

100. Q. In what manner is this accomplished? A. She stays the hand of Ulysses, raised in fell self-defense against the avenging kindred of the suitors, and enjoins a solid peace between the two parties at feud.

101. Q. In this appearance what familiar form does the goddess Athene assume. A. That of Mentor, ancient friend of Ulysses.

THE CHAUTAUQUA UNIVERSITY.

BY PROF. R. S. HOLMES, A.M.

The Chautauqua University is empowered by its charter to grant the degrees ordinarily conferred by American colleges. The chief of these are Bachelor of Arts, Bachelor of Science, Bachelor of Philosophy, and Civil Engineer, to be awarded to undergraduates at the completion of certain prescribed courses of study, as the seal of their work and the sign of their graduation. The degrees of Master of Arts and Doctor of Philosophy are the leading post-graduate degrees. The Chautauqua University proposes to use the power granted by its charter whenever the occasion may demand. It believes that good and thorough study may be done at home; that good and thorough instruction may be imparted by correspondence; and when good home study and good instruction by correspondence are united, it believes that as good and thorough education will result as results from resident college training, and such education it proposes to recognize and crown.

The Chautauqua University does not contemplate the bestowal of degrees upon groups, or ranks, or classes of individuals who may for certain periods of time have been associated in the same studies and the same courses. It is the individual student, as an individual, who will receive the Chautauqua degree, and not he, until after tests severer than are required of students in the average college, and after more years than college students think they can spare from practical life. The student of the Chautauqua University is in practical life when

he becomes a student, and remains in practical life while he is a student, consecrating to self culture those spare hours which his neighbor, who has graduated long ago, spends in idleness or in restless quest of amusement.

The Chautauqua University does not design to lower the standard of attainment essential to a degree. This does not mean cheap diplomas for the masses—it means education for those who have stood outside the gates of opportunity; it means lofty purpose, noble aim, self-sacrificing consecration to culture of mature hours and rigid discipline whose end is power. This institution opens no door to the multitudes of youth annually leaving our high schools, through which they can pass along some royal road to enter the portals and sit down in the palace of culture. To all of this class who can, it says go to college; climb the heights of Olympus; sit on the hill of Helicon; drink at the Pierian spring; walk in the groves of the academy; seek with Crito to catch Socrates as he passes out of his prison; put on the buskin; wear the laurel. For you we have nothing. But for the great majority of those who, year by year are passing from school into the practical avenues of life, the multitude who can not go to college, we rear an altar by the fireside, on which we kindle the fires of truth, by whose light they shall see clearly to read the mysteries of that world of knowledge into which their more fortunate companions have gone; and when the years have

passed, years of patient toil, of earnest endeavor, of unswerving purpose, of daily sacrifice upon those altars of spare moments of time, they, too, shall wear the laurel.

The Chautauqua University has no purpose of swelling Chautauqua ranks at the expense of established resident institutions. It offers no allurement to turn young men or young women away from college. It seeks to foster the college spirit, to create a desire for intimate knowledge of the liberal arts. It would see college graduates numbered not by tens, but by hundreds. It holds high the banner of college education. On it are inscribed the immortal names of Edwards, Hopkins, Woolsey, Dwight, and the long illustrious list of those who have made illustrious the institutions with which they were connected. It bids the young men of the nation to range themselves beneath their standard, *if they can*. But for those who can not, the young, gifted, anxious, who are longing to stand beside their former companions, but can not; for those also who could not, the mature, with vigorous powers, who by earnest labor and economic care have escaped the environments of early days, and are able now to give a leisure hour to study; for those, too, who would not, and who to-day regret and would atone for the mistake of by-gone days; for all these we raise the standard of the Chautauqua University, and bid them range themselves beneath it. *Tandem fit surculus arbor*—“The sapling has at last become a tree.”

But while Chautauqua takes this last step upward she forgets and abandons nothing of her past. The Assembly, with its years of wonderful influence, goes on to widen that influence. Chautauqua Literary and Scientific Circle, serving a purpose of wide usefulness goes on to enlarge that usefulness with ever increasing numbers. The methods which have made her past so successful and memorable will characterize her future. The annual pilgrimage of tens of thousands to the shores of the beautiful lake will continue. Sermon and lecture, discussion and conversation, representations of the treasures of art, and the wonders of science, study and recreation, pathos and zest will still instruct, delight, arouse and rest her summer multitudes. But all this does not complete Chautauqua's work for the world. There is higher summit to be reached, and on its crest is reared the University, and only accurate learning and close scholarship can speak the open sesame that will give entrance to her inmost shrines.

It has been the burden of this article to impress our readers with the idea that diplomas in the Chautauqua University can not be had on call, but will be awarded only to high attainment after strenuous toil. But while we would speak on this subject in language that shall not be misunderstood, we would not go to the other extreme, and deter any from entering upon the work. Though our standards are high, they are not too high to be reached. Art may be long, and time fleeting; but art is not too long and time is not too fleeting to allow an earnest man or woman in within their time to measure the length and breadth of the treasures art may hold.

The Chautauqua University appeals to a mighty constituency. There are a hundred thousand readers who, glancing

over the columns of their daily or weekly paper, will stop to read with attentive interest the article or item which contains the word “Chautauqua.” The circle into which their lines of influence radiate is almost without circumference. That appeal has been answered. From this constituency, within the month just ending, hundreds of inquiries, prompted by the article in the October issue of THE CHAUTAUQUAN, have reached the University office. They come from the farthest eastward province of the Dominion of Canada, and from the remotest southern and western states of the American Union. Chief among the inquiries has been one concerning the courses of study to be pursued for the attainment of specific degrees, prompted, no doubt, by the following paragraph from our preliminary circular:

DEGREES.

Among the degrees to be conferred by the Chautauqua University on the satisfactory completion by the candidate of prescribed courses, are the following:

- A. B.—A Full Academic Course.
- A. M.—A Post-Graduate Course in approved liberal studies.
- B. S.—An Elective Course in Science, Art, and English.
- Ph. B.—An Elective Academic Course.
- Ph. D.—A Post-Graduate Course in Philosophy, and one or more other liberal studies.

In pursuance of our purpose to show how much we shall require, and still that such requirement may be met by him who will, and to answer the inquiries on the subject, we add our proposed course of study for the diploma and degree of Bachelor of Arts. This is not sent out as final, or as not subject to modification. It is, however, substantially the basis of all work in the Chautauqua University, and is as follows:

The completion of the following courses of study, and the possession of certificates from the directors of the various departments which these courses represent, will be required before the student will be recommended for the degree of Bachelor of Arts: Two full courses in Greek; three full courses in Latin; four full courses in Mathematics; two full courses in French or German; three full courses in English; two full courses in History; one full course each in Philosophy, Political Economy, Physics, Chemistry, Moral Philosophy, Astronomy, the History and Literature of Art, and two full courses in Biological Science. The student will not be required to pursue these courses exactly as prescribed, as wide opportunity will be given the individual to substitute other branches than those named, or more courses in particular departments than are here specified, as he may elect. But in every case full courses equal in number to those specified will be required. For the other degrees the scheme of study now pursued will form the basis, such omission and substitution being made as are suited to the particular degree; but in no case will a diploma be given for less than twenty-two full courses. With this outline of work before them, students will be able to begin at once without further inquiry. Select the courses which you will first attempt; and with purpose never to cease your effort till success has crowned it, we bid you enter the Chautauqua University.

EDITOR'S OUTLOOK.

A DANGER FOR LOCAL CIRCLES.

We are often slow to believe that our pet institutions have points of attack. We become so enamored with their merits that we close our eyes to their dangers. Particularly is this true, we fear, in regard to the local circle. Its members rejoice so heartily in its existence that they are prone at times to forget that even a local circle is heir to the frailty of all human institutions, and that it may be threatened by dangers which, unless arrested, will destroy its usefulness. One danger at a time is

sufficient to consider; certainly so when so serious a one as narrowness is announced.

The whole plan of the C. L. S. C. is broad—it is literally for *all* men. Any department of the work which is conducted on any other principle fails to discharge its full allegiance. We fear that the local circle is in danger of losing sight of this great principle. Most natural is it for circles to so limit themselves. When a club of ten, twenty or thirty congenial members has been formed, when a pleasant plan of work has been adopted and

thoroughly organized, it is comfortable and natural to decide that the circle is large enough; that a larger number would spoil the informality, would bring in an uncongenial element, would be unmanageable. The growth of the circle is stopped in the community, and the harm done is threefold. Probably the most serious evil is that the exclusiveness of the circle has abridged the usefulness of the C. L. S. C. Intended for all men who need a course of reading it naturally asks from its members fidelity to this underlying catholicity of spirit. The original plan of its founder did not include the local circle. His idea was to ask from every reader faithfulness to the broad and inspiring principle on which he had based the plan. Every member was to lead others to the well. The local circle has grown up and is undoubtedly a wonderful help in many ways, but it is in danger of keeping the C. L. S. C. from the very people who need it most. A circle once formed, and which has closed its doors to all outsiders, naturally spreads the idea that the C. L. S. C. is a sort of a private club, that only certain kinds of people are admitted, or it is suitable for only such and such people. Utterly false and harmful in the extreme to the work, it is but a logical result from this exclusiveness.

An injury almost as deplorable is the encouragement this limitation gives to the widespread social evil of "sets." "Our set" is the bane of church union; it breaks up the harmony of Sabbath-schools; it divides our towns into a vast number of petty, jealous cliques. This spirit is contrary to the fundamental principles of our work, yet we encourage, rather than hinder it by narrowing our borders in the local circle.

Unless we do open our lines we suffer, ourselves. We lose the greatest aid which the C. L. S. C. has to offer—the inspiration which comes from working for a good cause. Sustained zeal is possible only when fed by unselfishness. Work becomes nerveless, narrow, crotchety, which has not the inspiration of being not only a help to oneself, but a help to others. To omit this labor for others is to leave out a most important part of the course.

But perhaps, it is argued, this is not practical. We have a habit, now-a-days, of declaring "not practical" a great many ideas whose utility is evident, but whose realization is attended with self-denial and constant effort. Do not be deceived. *All* good things are practical, if not always easy. Catholicity in the C. L. S. C. most certainly is so. Have you a large circle and do you hesitate before extending its boundaries, then you should form a second circle. Through the efforts of your members not only one but any number might be started, until there would not be a house in your town in which the C. L. S. C., if not a member, at least would be an acquaintance. These could meet separately each week, but monthly meetings, memorial celebrations and vesper services should be held jointly. In every city where local circles exist, at least three joint meetings should occur in the year. Each society should be represented at these meetings, and provision should be made for social converse. This plan, so easily arranged, has been successfully tried in many places. It does not hinder the great work of a small circle, and removes the danger of narrowness. It may cost you self-denial and struggle, but the broader view of your true relations to men which you will get, the inspiration of seeing the work extended, and the increased friendliness in the inhabitants of your town will more than compensate.

ELECTING A CHIEF MAGISTRATE.

Under the wholesome rule of the constitution, by which power regularly returns to the people for a new lease of it, we have just chosen a President of the United States. It is wise to remember the things which were *not* before the people for their decision. There is, for example, the constitution under which we live with its securities for all well-defined rights under a judiciary made as independent as possible. There is also that system of local self-government vesting in states,

cities, counties and towns, the control of business which is exclusively their own. There is the general policy of leaving the people to transact private business for themselves and relieving them of infantile dependence on the government. What a contrast to that Roman empire which gave *panem et circenses* to the people and reduced the popular conception of government to that of a good fairy who furnished food and amusement—ran the bakeries and the theaters! But on the other hand, we may as wisely remember that a campaign may have fatal bearings on our dearest interests, highest moralities and most revered sanctities. It is conceivable that the result of an election might be the admission of polygamous Utah as a state, and the consecration of plural marriage as one of the allowable and honored modes of founding the American family. It is also conceivable that as the result of an election the laboring classes might be reduced to distress, and all of us along with them, by the establishment of free competition between our workmen and the men in blouses, and the women in wooden shoes, on the other side of the ocean. It is possible, too, that a new interpretation of the constitution which would seriously impair private rights might grow from the results of an election. Nor can we forget that the *spirit* of our public life is powerfully affected by the discussions and the management of political campaigns. The profuse spending of money to influence votes, the recklessness which breaks out in ballot-box stuffing and counting-out frauds is more dangerous than any proposition to alter the constitution; for it does alter it and sells out the governing of us to unscrupulous managers.

And therefore it is a happy result of our political system as our fathers gave it to us, that the people interest themselves in elections, discourage great changes in our laws, impose a conservative policy upon parties, demand respect for the sanctities of the family and of society, and frown upon corrupt practices in handling the national ballot-boxes or influencing the nation's voters by bribes and unlawful promises.

We have for the twenty-fifth time chosen a President. The office has grown in its burdens, but it has not grown in its constitutional powers. For ten years there was a great danger that its wholesome powers would be seriously reduced by the so-called "courtesy of the Senate," according to which the President became the clerk of the Senators for Federal appointments in each state. But since the pistol shot which killed President Garfield was fired, the so-called "courtesy" has ceased to be named except for condemnation; and the President retains the power Washington had to nominate office-holders in the several states. Probably there has never been a time when the highest office was more carefully and exactly defined by practice in harmony with the constitution. The President does not dictate to Congress, force nominations through the Senate, or interfere with the independence of the Federal courts. On the other hand one may search the newspapers in vain for a trace of distrust or criticism in any of these vital concerns. After the war there was a period during which the constitution underwent severe strain at several points. The criticisms of the times of Johnson and Grant turned mostly upon constitutional questions. The conflicts of politics bore upon that class of differences. To many it seemed doubtful whether our institutions could survive these struggles. Providence has been good to us; we have been good to ourselves and our children. The storms are overpast. The constitution exists unimpaired; it is universally accepted as the fundamental law. There has not been a breath of discussion about it in the late campaign. It is many quadrenniums since the like occurred; indeed we doubt if there ever was any such campaign in this respect. Here and there a man may be found to explain our peace as ignorant indifference; but he is profoundly wrong. The separate powers of the government are well defined, and the independence of each in its own domain is preserved. The single new machine—national supervision of congressional elections through U. S. Marshals—had

in it great possibilities of danger. It might have been so handled as to vest the power to hold the ballot-boxes in the President's hands; but it has simply created salutary checks on frauds. Here and there an isolated case of improper interference may reach the record; but there is no fear abroad that our chief magistrate abuses his powers. The errors when they occur are only the blunders of individual officers, not an organized invasion of the people's rights. So little has been said about this piece of machinery recently, that we half fear that some readers have forgotten or never heard of the Federal election laws. The sum of what we would say is that the late election marks the subsidence of those waves of constitutional disorder or conflict which had run high from the beginning of the war to the death of President Garfield. We have evidently entered upon a new field of partisan controversy; and no constitutional questions, only questions of expediency, are before us or are likely to be. The industrial problems as related to tariff questions, perhaps also some others, such as the expediency of National savings banks and life insurance bureaus for the poor, are likely to lead the political thought into channels which were never before open to it in the line of humanitarianism and the general welfare. In becoming a manufacturing nation we have traveled to new political outlooks. We have to adjust ourselves to the results of our tariff laws, whether or not we like either the laws or its results. The results are some millions of men and women earning wages in mills, whose fate and that of their children is in our hands. We shall be tempted to follies of protection as well as follies of free trade; to follies of philanthropy as well as follies of indifference and neglect. To thoughtful men the path to safety may well seem as narrow as the edge of that scimetar along which the Moslem saint skated into Paradise. Let us hope that the conservative genius of our people will not fail in these new fields of political activity; and that the buoyant hope of this growing people may continue to lift us out of the dangers of the failure of self-confidence. It is our happiness that we feel able to govern ourselves, equal to our problems, superior to our perils. "If it should ever come to pass that the mass of our citizens lost the self-assurance for which foreigners sometimes unwisely rebuke them, they would begin to transfer the government to oligarchies, aristocracies, or "the man on horseback." The campaign has had many unpleasant incidents—political mills can not be clean and quiet any more than other mills can—but a judicious observer will have noted with satisfaction that the plain men have everywhere felt equal to forming their own judgments about grave matters concerning which the so-called wise have differed most energetically. And inasmuch as the wise could not agree, it is safe to say that the wayfaring men have displayed as much sense as "their betters," and more courage and consistency. We have been impressed by the experience of the campaign with the belief that the average American, who knows neither Latin nor science, does understand his principal business—that of governing this country.

PRINCIPAL FAIRBAIRN'S LECTURES.

The lectures of Principal A. M. Fairbairn, of England, on the Chautauqua platform last summer, were a valuable contribution to contemporary philosophy. Their subject is Modern Philosophy in its specifically English form. Starting with Locke, and passing along through the ideas of Berkeley, Hume, the Mills, Comte, and Herbert Spenser, the learned and brilliant lecturer gave us a history of modern speculation respecting the problem, "How is knowledge possible? What are its conditions? How does man come by it?" We have lately read over again these lectures in the careful reports made for the *Assembly Herald*; and we believe we shall render our readers a service by calling their attention to the importance of them and reminding those who have not files of them that they are on sale at this office. There is a very remarkable unity in the empirical philosophy which is associated with the names we

have just given, and this unity was developed with rare skill by Principal Fairbairn. John Locke, the English founder of the school, formulated and determined the problem of philosophy for the English and the French peoples; and though each of them was original after his kind, Berkeley, Hume, the Mills, Comte and Herbert Spenser have worked upon lines which Locke laid down. Locke asked himself, how do ideas come into the mind? and answered his question by saying, there are no ideas in the mind until the senses have conveyed them in. In other terms, he undertook to disperse as a metaphysical mist the "innate ideas" in which philosophy believed when he began to write. In varying forms, the notion that there is nothing in the mind except what the senses have put there remains the creed of the empirical philosophy. The criticism of Principal Fairbairn upon the successive statements of the doctrine that the outer world is prior, and creates the inner world, is very keen and accurate. Locke was fond of saying that the mind was like a clean table, to which the senses brought ideas. Our critic asks: "Did you ever find a table that could grasp the significance of what was graved on it?" and adds, "It is the power to read the writing and weave it into a connected and reasonable and rational whole, which is the very thing to be explained. It is not how nature through the senses comes to me, but how I through the senses read nature." And one of his strong and luminous statements is, that "Ideas can not get into the mind unless there is a mind to get into."

The purpose of the critic throughout these lectures was to establish the priority of thought by disposing one by one of the various attempts to post-fix mind to matter. The attempts successively made to attach mind, ideas, thought, conscience, and philosophy to the tail of the material kite, all tended, of course, to skepticism. As a theologian Dr. Fairbairn was instinctively drawn to the task of reversing this order so as to attach matter as a tail to the kite of the spiritual world. No matter how plausibly stated, the theory that our knowledge and our minds are a result of material energy reduces any possible God to the status of a product of nature. If in reasoning about ourselves we shall finally conclude that our inner totality is simply and only a product of the external world, we shall be forced to conclude that all thought in the universe is of like origin. The skeptical result is inevitable. Whatever view we take of substance in nature we are compelled to decide whether or not it is so moulded as to express the thoughts of an infinite God. If we so believe we shall find it easy to explain how thought in us finds a *cosmos in nature*. If the infinite mind reveals his thought in the order and harmony of the external world, the fact easily explains why we *find* order and harmony there. It is not necessary to reduce the external world to a phantasmagoria of the mind in order to vindicate a place for God. Rather the most subtle and dangerous of skepticisms may lie in the teaching that innate ideas construct the harmonies of nature. Berkeley said we are reading God's thoughts in the visible world; and Hegelianism, to which Principal Fairbairn evidently leans, dispenses with matter while filling the universe with thought. It is equally easy to give matter reality as a plastic thing on which God writes his thoughts so that we may read them. This question of the reality of substance may very properly be the next one to command the attention of philosophy. But it must be remembered that the science which resolves matter into motion and force conspires with the philosophy which makes matter merely the expression of divine ideas.

But we do not wish to make our readers heads ache with philosophy; only to suggest to those who are interested in it that these lectures will afford them valuable instruction. At their close on the Chautauqua platform, Chancellor Vincent expressed in happy terms the admiration of thousands who heard these lectures for their vigor and eloquence. He said: "Principal Fairbairn, in behalf of Chautauqua I desire to say

a very few words. We are glad that you came. We are sorry that you must go. You have commanded our admiration by the elegance, clearness and force of your diction, but preëminently by the vigor and freshness of your thought. You stand before us a great 'phenomenon.' [Applause.] For we have been

accustomed to vigorous thought read from manuscript, we have been accustomed to vigorous thought put into memory and recited with accuracy, but this living, present, compact, vigorous thinking on one's feet, that has held us spell-bound, is a very remarkable occurrence at Chautauqua." [Applause.]

EDITOR'S NOTE-BOOK.

The saying "politics makes strange bed-fellows," never had a more dramatic exhibition than in the case of Henry Ward Beecher. In the late campaign, he was violently handled by the only paper in New York which supported and defended him in his trial; and he has been on the same side with the papers which at that time most infamously abused him. The press is also fairly representative of the public around him; his life-long friends have now been opposed to him; and one friend of other years has been branded by him as "a continental liar," whatever that may be. "It is," say his present friends, "the fate of a prophet." His older friends say "he is growing old."

In England, in one county, 30,000 acres of good land are tenantless because the laborers and farmers have gone to manufacturing towns. To cure this evil Lady Catherine Gaskell wants to put a stop to educating the poor. She is a picturesque reformer who may be safely classed with the Roman pontiff. She would forbid the humble classes to wear clothes such as other people wear, send them to the fields at three o'clock in the morning, and keep them with the cattle. The dear soul is probably mad, at least "south by southwest."

It is said that the Jesuits are creeping back into Rome and buying property in the names of private persons. The Pope is very busy and hopeful in his work of strengthening the church. One aspect of this matter of the Papacy and its Jesuit agents, is too much overlooked. Italy can not successfully fight either the Papacy or Jesuitry with *atheism*. So long as the Catholics have the religion of the country they will actually rule it, whatever may be the form of government. A dreadfully perverted Christianity is still a positive force, advancing and aggressive. Atheism is not a force; it is a barren negation. A Protestant Italy is the want of liberty in that peninsula.

Wm. H. Vanderbilt has given \$500,000 to the New York City College of Physicians and Surgeons. The gift is wise and generous, and it breaks a disagreeable silence. It is only by such gifts that very rich men can satisfy our moral sense. The vast wealth can be justified only as a stewardship for one's fellow men; and we want to see the proofs that the stewardship is righteously exercised.

A Chinese pamphlet, instigated by the French invasion, and designed to inflame the passion of the celestials, says that Europeans are not human beings at all, but wild animals descended from monkeys. We fear that an imperfect copy of Darwin has fallen into the hands of this pamphleteer; but he gives us a chance to see ourselves as others see us.

October is the month of political parades in the political almanac. This year the display at some points was magnificent. Broadway, New York, with from thirty to sixty thousand men in line, in the picturesque costumes of contemporary politics, is the most imposing sight in the world. And our sober-sided people seem to like and enjoy this single form of public theatrical effects.

Now and then a good man is plentifully advertised as "a man with a conscience." Would it not be easier and more wholesome to morals to confine this kind of advertising to the men who are without consciences? The men who have consciences must be very numerous.

The appointment of the Hon. Hugh McCullough as Secretary of the Treasury reminds us, not only that President Lincoln nominated him to the same office, but also that he returns to the most arduous office in the United States at the age of seventy-three. His health is perfect, and he has the vigor of middle age. The old men are holding out in American public life about as well as they do in English politics.

Mr. Wm. J. Stillman, an American artist and writer who has lived abroad for twenty-five years, makes a practical suggestion which all who have crossed the Atlantic just once will appreciate. He proposes that the eating on ocean steamers be done on the restaurant principle, each passenger paying for what he eats, at fixed prices. If the plan is adopted, it will considerably reduce the cost of that trip to Europe of which most of our readers are dreaming. Eating and a first voyage are antipathetic.

It is a very amusing thing (to us Americans) which Professor Goldwin Smith says in a recent number of the *Contemporary Review*, that the organization of a government in England can not be long delayed. The fictitious constitution has broken down, he thinks, and a real one (somewhat like ours, but better) must be made for modern England. But the Professor always was hysterical.

The result of the French war in China is still in doubt. Three months ago the French papers were writing about their great victory and proposing that their Tonquin army conquer the Christian queen of Madagascar. Now the latest public statement is that the army in Tonquin is sufficient for *defensive* operations. There is a gradual growth of manifestations of hostility by the Chinese against all foreigners, and an outbreak is *possible* which might arm the Christian world against China; but that seems to be the only door of escape for the French from a long and costly war.

The desperate condition of railroad property has been made more desperate by a rate-cutting war. There are more roads than are needed, and this state of things reduces the fares and freights to be divided among an increased number. The result is a still further reduction by reduced fares of passengers. The problem of this class of property is a difficult one; and it is a large one and closely related to the general prosperity. A first step would seem to be getting speculators out of the directorates.

The Northern Pacific Railroad recently transported a solid wheat train containing one hundred and ten cars. Ten years ago the whole region in which this wheat grew was a wilderness. But the farthest great wheat field has now been opened to culture. Wheat will not always be cheap, though it need not be scarce. With the rise in price will come a vast increase of production in the older states.

We are entertained by the solemn pleadings of certain journals that boys be allowed to take exercise, that the schools be restrained from spoiling their bodies while cultivating their minds. Any one who knows a boy when he sees one must "laugh consumedly" over this reform. Teachers will find special and boundless amusement in the idea that a boy can be kept from abundant and even violent exercise.

An interesting side-light on our civilization is the fact that some of the Sitting Bull Indians have been exhibiting themselves and their costumes and customs in a New York theater—"to make money to build houses and buy furniture," the manager says. This is more heroic than taking scalps for glory.

Once when the superior generalship of General Lee was explained to General Grant, he replied with his usual modesty of tone: "I believe I beat Lee." We are reminded of the incident by an elaborate explanation that England had all the points of success in her favor, and had them all properly counted in our two wars with her. And yet—we seem to have heard that—we came out ahead. These metaphysical victories are not very satisfactory. Artemas Ward said: "I pulled my enemy down on top of me and firmly inserted my nose between his teeth." Still, his nose got the worst of it.

The humors of campaign politics are often good enough to keep. After the October election in Ohio a Republican paper said: "John R. McLean, the Democratic manager, married a wife a few days before the election, and after the state was lost to his party, was the only happy Democrat in Ohio." We hope Mrs. McLean saw the neat compliment to herself.

Farmers are peaceable people, and yet the lawyers would starve to death if farmers did not furnish them lawsuits. A movement is on foot in New York state to settle farmers' differences by arbitration. The Patrons of Husbandry recommend this method, and there is some prospect of its adoption on a considerable scale. We commend the plain common sense of it to our agricultural readers.

King Humbert distinguished the throne of Italy by visiting the plagued cities and following the cholera into hospitals. The Pope, as the pretender to the temporal throne of Rome, had to demonstrate also. He has called for an organized assault by prayer on the heart of the Virgin Mary. It is easier than visiting plague-infested towns, and safer. But the Pope proposes to pay those who pray. All who take part in the "rosary prayer" will get absolution for seven years—not from cholera, but from their sins.

How many people will be in the world in 2000 A. D.? is one of the questions pressing for settlement in the heads of statisticians. It is comforting to know that these interesting and romantic persons assure us that the United States will have six hundred millions, if nothing in the nature of a preventing Providence intervenes. It is a comfort to know that the jury have no personal interest in this verdict in our favor.

This country will have to make some laws on the subject of timber. The big forests are rapidly becoming only memories. We make some kinds of lumber from straw, and iron has taken the place of other kinds. But the woods have climatic uses, and a treeless land is exposed to evils more costly than the value of the timber we are wasting. The annual floods are one item of the cost of destroying trees; changes of climate, which can hardly be measured, are another item but little thought of. The trees are a part of natural economy of the earth.

Public debts are made with far too much carelessness; but people who wish to evade taxes so arising, repudiate *en masse*; and hence comes the interesting question: "Are we a nation of rascals?" If one judges by the number of worthless (or little worth) bonds of all sorts which are in existence, we are a nation of rascals. There must, in other words, be some rascally element in the national character, or all these promises to pay would not be dishonored. The genesis of the good-for-nothing bonds ought to be written philosophically; that may be a necessary preface to writing it with a moral purpose.

The Boston *Traveler* of November 6th contains, in its editorial department, the following noble compliment to the C. L. S. C.: "This society that teaches the use of leisure hours and inspires the men and women of America with an intelligent aspiration to learn something of all that it is practicable to learn in home study by imparting the enthusiasm of companionship in work, has this year almost twice as many ardent, self-sacrificing students of its curriculum as the combined membership of all the American colleges from Maine to Washington Territory. When we consider the influence of a single collegiate institution, many of whose students attend from parental rather than personal aspirations, and think how much money is annually raised through benevolence for them, exceptional praise is due him who has by his own wit and wisdom, without financial appeal or charitable pretence, called into line for the study of history, philosophy, science and literature nearly double the constituency of all our colleges."

A story comes from one of the Southern states that a man recently committed suicide rather than pay his taxes. Of the two inevitable things, death and taxes, he seems to have preferred, contrary to the common choice, to suffer death. The story furnishes a text for a sermon on the modification of general feeling relative to taxation. The suicide of the story was a survival; taxes are no longer regarded with aversion; they are paid, as grocers' bills are, with equanimity.

The desire to fly "springs eternal in the human breast," and the balloon is a very fascinating field of experiment. A Frenchman seems to have gained a point, and a good one. By using stored electricity he has succeeded in going where he wanted to go, moving for four hours against the wind. An Englishman has invented a means of keeping a balloon at the same level, he thinks. Perhaps ballooning may yet become a practical science.

Eccentric opinions sometimes have a fine and ancient flavor combined with a modern taste. Such is the statement recently made in a public meeting that insanity is increasing among the colored people, and that education is the cause of it. The reader can pick out the two tastes. We fear that the colored people are not yet educated enough to cause insanity, and we do not seem to know that education ever caused anybody to become insane.

Among the "fashions" is the rage for old furniture. Grandmother's spinning wheel adorns the parlor, and worm-eaten old bureaus flank it on either side. But a dealer in this kind of goods, speaking of course against his rivals in trade, says that most of this old furniture is made at modern factories. Even the old spinning wheels are imitated to perfection. A story—wicked, perhaps—says that a Connecticut man is getting rich making "Mayflower heirlooms." Persistent rumors of this kind will kill the fashion.

One of the notable events of October was the celebration throughout the world of the hundredth birthday of Sir Joseph Montefiore, the wealthy Jew whose philanthropy has shed luster on his race. In this celebration the Hebrews have the sympathy and congratulations of Christians everywhere. The venerable philanthropist has shown what wealth is good for, and set an example of faithful stewardship which ought not to be lost on other millionaires.

Some one has figured out that "just now, in the United States," twenty-one deaths in a hundred are caused by violence. It is safe to avoid this kind of statistics. There is no means of knowing what the rate of death by violence really is "just at present," and it is perfectly certain it is not twenty-one. It is only seven in England, where statistics are kept. We keep none except in large cities, but we certainly are not three times as bloody-handed as Englishmen.

New York had pending in the late election an amendment to the constitution limiting the debts of towns and cities in the ratio of population. In Illinois, in 1870, the new constitution put in force a similar rule. The effect, in many towns, was a series of "improvements," carrying the debt up to the constitutional limit. The towns were ashamed of themselves when they found that they did not owe as much as the law allowed them to owe.

The horror of being buried alive is the most blood-curdling one known to civilized life, and yet cases of people being buried alive continue to be reported. The death of a woman at Hornellsville, N. Y., was certified by a physician. She was removed from the grave, and report says that, though in all other respects apparently dead, the body perspired freely. It looks like a case of trance. At all events she was buried too soon, and it is probable that in other cases bodies are frozen to death a few hours after apparent death. The whole subject of trance invites study of a more thorough sort than it has hitherto had.

Unpunctuality is a seductive vice in social matters. When a party or a dinner is announced for a given hour, it should begin at that hour, and not an hour or two later. The French custom is to allow half an hour for dilatory guests at dinners; but in other matters the French way is for each of the parties

who have made a rendezvous—unless as duelists—to give the other half an hour's margin, which being taken on both sides makes in all an hour. This system of addition is analogous to what a Californian said of a big tree—it grew so high that it took two men and a boy to see to the top.

ERRATA.—Dr. Felix Oswald, speaking of the principle governing schools of medicine, in THE CHAUTAUQUAN for November, made a quotation concerning the school of Homeopathy, to which a few of our readers filed exceptions. It was not Dr. Oswald's design to reflect on this honorable class of people, beside, THE CHAUTAUQUAN is not sick, and needs no physician; therefore it is not a partisan among medical men.

In Miss Frances E. Willard's article, "Romance vs. Reality," in THE CHAUTAUQUAN for November, the statement that in Ohio in 1883 only 90,000 votes were cast against constitutional prohibition is misleading. There were cast at that election 721,310 votes; now the constitution of Ohio requires that an amendment to be adopted must receive a majority of all the votes cast, which would be 360,655, while the actual vote cast for the amendment was but 223,189.

The class of '84 "shines for all." Up to November 1st 1,387 have graduated, and still more to come.

C. L. S. C. NOTES ON REQUIRED READINGS FOR DECEMBER.

PREPARATORY GREEK COURSE IN ENGLISH.

P. 172.—"Hip-pol'o-chus." This son, Glaucus by name, was a prince of Lycia, a country on the south side of ancient Asia Minor, and an ally of Priam. Hippolochus is remembered only as the father of Glaucus and the son of Bel'le-r'o-phon, who slew the fire-breathing monster, Chi-me'ra, which had long ravaged Lycia. Glaucus was slain at last by Ajax.

"Braggadocio," brag-ga-do'shi-o. Boasting; brag. Braggadocio is a character in Spenser's "Faerie Queen," famous for his boastful talk, and his name furnishes us this word.

P. 173.—"Bentley," Richard. (1662-1742.) "Perhaps the best classical scholar England has ever produced."

"Foster." (1770-1843.) A Baptist minister of no great prominence as a preacher, but the author of a large number of valuable essays on biography, literature, philosophy and society.

P. 174.—"An-drom'a-che." The daughter of the king of Thebe in Cilicia. Her father and seven brothers were killed at the taking of Thebe, and she was ransomed. After the fall of Troy, Andromache fell to Pyrrhus, the son of Achilles, and he dying, she married Helenus, the brother of Hector, who had escaped the fury of the Greeks and gained the favor of Pyrrhus.

"Hec-to-ri/des."

P. 175.—"E-e'tion." The king of Thebe.

"Pla'cos." A mountain of Mysia, near Thebe.

"Ad'ja-ces." The plural of Ajax, the name of two Greek heroes in the Trojan war. Ajax the Great was a son of the king of Salamis, and second in valor to Achilles. After the death of this latter hero, Ajax contended for his armor with Ulysses, but being defeated, he went mad and took his own life. The Lesser Ajax, as he was called, was a prince of the Locrians, and rivaled Achilles in swiftness of foot. He was drowned while returning to Greece.

"I-dom'e-neus." The king of Crete, one of the bravest heroes of the Trojan war.

"A-tre-us." "The two chiefs born to Atreus" were Agamemnon and Menelaus.

"Ty-di'des." Diomed, the son Tydeus.

P. 176.—"Hec'u-ba." The mother of Hector.

"Mes-se'i's." A fountain in Laconia.

"Hyp-e-rei'an." Homer speaks of several fountains called Hyperia, located in Thessaly.

P. 181.—"An te'nor." One of the wisest counselors of the Trojans, and one of the few spared by the Greeks at the capture of Troy.

"As-tra'e-a." Referring to the constellation *Virgo*, between which and the Scorpion "the golden scales" or Libra lies. Astraea was a daughter of Zeus fabled to have lived among men during the Golden Age, and to have been set among the stars at its close.

P. 191.—"Voss." (1751-1826.) A German scholar. His translation of the "Odyssey" has been, since 1781, the standard German version of that poem. He made translations of many classical works, wrote on Grecian mythology, and was a poet of ability.

"Chry-se'i's." The daughter of a priest of Apollo, captured at Thebe, and the booty of Agamemnon. Her father solicited her ransom, and when refused, Apollo sent a plague upon the Greeks. Agamemnon was obliged to surrender her, and to make good his loss, demanded Briseis, Achilles' prize, hence "the wrath of Achilles."

P. 193.—"Seventh of March." A speech delivered in Congress by Webster on March 7, 1850, in which he justified the fugitive slave law.

P. 196.—"Dae'da-lus." Fabled to have been an Athenian architect who, for murder, was condemned to death. He fled to Crete, where he constructed among other works a labyrinth at Gno'ssus, or Cnossus, in which to confine the monster Minotaur. The caves and quarries in Mount Ida probably led to this legend.

P. 197.—"A'ri-ad'ne." The daughter of Minos, the king of Crete.

P. 201.—"Moly."

"That Moly,

That Hermes once to wise Ulysses gave."—Milton.

(See page 231 of "Preparatory Greek Course.")

P. 202.—"Eu'ry-tus." A legendary hero of Thessaly, said to have been a famous archer. He instructed Hercules in this art, and even boasted to be equal to Apollo.

P. 208.—"Dy'mas."

P. 210.—"Er-y-man'thi-an." Pertaining to a mountain in Arcadia, famous as the scene of the hunt by Hercules of the Erymanthean boar.

"Ta-yg'e-tus." A range of mountains between Laconia and Messenia.

P. 214.—"Eu'ry-me-du'sa;" "A-pe'i-ra."

P. 215.—"A-re'e-te;" "Per-i-bo'i'a;" "Nau-sith'o-us;" "Eu-rym'e-don."

P. 216.—"Rhex'e-nor;" "Scheria." (See page 224 of "Preparatory Greek Course.")

P. 217.—“Argus-Slayer.” Mercury, who, by the order of Jupiter, killed Argus, whom Juno set to watching Io after she had been changed into a cow.

P. 218.—“Ech’e-ne’us;” “La-od/a-mas;” “Lustral.” Purifying.

P. 219.—“Pon-ton/o-us.”

P. 222.—“Rha-da-man/thus;” “Tit/y-us. A giant of Eubcea, fabled to have been after death cast into Tartarus, where he lies with two vultures devouring his liver—a punishment for attempting to violate Diana.

P. 227.—“De-iph/o-bus.” A son of Priam. The Greeks went first to his home on the capture of Troy, being bitter against him, as he was counted second in valor to Hector, and as he had married Helen on Paris’ death.

P. 230.—“Eu-ryl/o-chus;” “Pram’mi-an.”

P. 235.—“An-tin/o-us.”

P. 236.—“Eu-rum’-a-chus;” P. 237, “Am-phin’o-mus;” P. 238, “Ag’e-la/us;” “Me-lan’thi-us.”

P. 239.—“Eu-mæ/us;” “Do-li-us.”

P. 240.—“Men/tor.” A firm friend of Ulysses, to whom the latter confided his property when he went to the Trojan war. Minerva assumed his form in order to teach Telemachus. “Da-mas’tor;” “Al’ki-mus;” “Eu-ryn’o-mus;” “Am-phim’e-don;” “Dem’op-tol’e-mus;” “Pei-san’der;” “Pol/y-bus.”

P. 241.—“Eu-ry/a-des;” “El/a-tus;” “Cte-sip’pus;” “Eu-ryd/a-mas.”

P. 242.—“Lei-oc’ri-tus;” “Lei-o’des;” “Phe’mi-us.”

P. 243.—“La’er-ti/a-des.” The son of Laertes. “Me’don;” “Phil’o-ti-us.”

P. 245.—“Eu-ryn’o-me;” “Eu’ry-clei/a.”

P. 247.—“Ac’to-ris;” “Lam’pus and Pha’e-thon.” The goddess of the morning dawn (E’os in Greek, in Latin Au-ro’ra). “At the close of every night rose from the couch of her spouse Tithonus and on a chariot, drawn by the swift horses, Lampus and Phaethon, she ascended up to heaven from the river Oceanus, to announce the coming of the light of day to the gods, as well as to mortals. In the Homeric poems Eos not only announces the coming sun, but accompanies him throughout the day, and her career is not complete until the evening; hence she came to be regarded as the goddess of the daylight.”

P. 249.—“Ci’cons.” After the capture of Troy Ulysses set out for home, but was driven by a storm on to the coast of Ismarus, a town of the Cicones in Thrace, north of the island of Lemnos. He took much booty from the town, though in the fray several of his men were killed. The adventures of the company with the Lotus-eaters are told on page 228, and with the Cyclops on page 200. After leaving these giants he came to the island of the god of the winds, Æolus. This island has been said to be Lipara, or Strongyle, in the group of Lipara islands, northeast of Sicily. Ulysses was well treated by Æolus, who gave him a bag of winds on his departure, which was to carry him home. The companions of Ulysses, however, opened the bag, and the winds escaped. The ships were driven back to the island, but Æolus would give no further help. Six days afterward the fleet arrived at “the wide-gated Les-try-go’ni-an-town,” supposed to be Tel-ep/y-los, in the north of Sicily, where dwelt the Les-tryg’o-nes, a race of cannibals. Ulysses fared hard among them, escaping with but one ship. Circe and her wiles are told on page 230. In Hades Ulysses learned mainly that he was at last to get safely to Ithaca, providing that he let the herds of He’li-os, “the sun’s kine,” in Thrinacia go unharmed. The “Sirens” lived on an island somewhere near the western coast of Italy, and sang so sweetly that all who came that way were forced to stop, when they were destroyed. Ulysses filled the ears of his companions and fastened himself to the mast of the ship. Next he came to the rocks called Scyl’la and Cha-ryb’dis. The former received its name from a fearful monster with twelve feet, six heads, and a bark like a dog, which dwelt thereon, and the latter from a being who thrice every day swallowed the waters of the sea and thrice threw them up. They passed uninjured and came to Helios’ (the sun’s) land. Ulysses was compelled by his companions to land, and while he was one day asleep they killed some of the sacred oxen. When again under way the storms arose which drowned all the company save Ulysses.

P. 252.—“Ar-kei/si-as.”

E-dec

P. 253.—“Al’y-bas;” “A-pei’das;” “Pol-y-pe’mon;” “E-per’i-tus.”

P. 254.—“Par-nas/sus.” See map, History of Greece. It was on Mount Parnassus that Au-tol/y-cus lived. He was a son of Mercury, and renowned for his robberies.

NOTES ON CYRUS AND ALEXANDER.

P. 14.—“As-ty/a-ges.”

P. 25.—Names of the nine muses. See “Brief History of Greece,” page 73, and note in Cyrus and Alexander.

P. 29.—The mother of Cyrus was named Pa-rys/a-tis. There is a brief reference to her in “Preparatory Greek Course,” page 65. The attempt on the part of Cyrus to assassinate his brother is denied by some writers. From the “Introduction” to “Kendrick’s Anabasis” the following quotation is taken: “During the last illness of his father, Cyrus was summoned to his bedside, and with Tissaphernes as an ostensible friend, and with three hundred Greeks he went up to the capital, with strong hopes, doubtless, that the question of the succession to the throne might be decided in his favor; the queen-mother espousing his cause, and he being, though not the oldest son, yet the oldest son born after Cyrus was king. He was disappointed in his hopes; and, not only so, but, through the accusations of Tissaphernes, was even seized on charge of a conspiracy, and escaped death only through the powerful intercession of his mother, Parysatis. Being dismissed from the court, he returned to his satrapy, burning with resentment, and determined, if possible, to shake off all dependence on his brother by succeeding to the throne. He immediately commenced a secret mustering of the troops needed for so great an enterprise.”

P. 30.—“The Auxiliary army,” from Greece. “The Peloponnesian War had just come to a close, and had released from service large numbers of trained soldiers, fond of war, and ready to enlist, as soldiers of fortune, in any enterprise that promised success and good pay.” Also see “Brief History of Greece,” page 33, note.

P. 35.—“Cyropedia.” For pronunciation and definition see “Preparatory Greek Course,” page 62.

P. 37.—“Cam-by’ses;” “Man-da’ne.”

P. 40.—“Har/pa-gus.”

P. 42.—“Mit’ri-da’tes.”

P. 51.—“Ar-tem’ba-ris.”

P. 75.—“Saci.” The Sacians, or Saciæ, were one of the numerous and most powerful of the Scythian nomad tribes, and had their abodes northeast of the Massagetae, in the steppes of Central Asia. They were made tributary to the Persian empire, and were among the best troops that the kings of Persia had. They were very warlike, and excelled especially as cavalry. The name of the Sacians is often used loosely for other Scythian tribes, and sometimes for Scythians in general.

P. 97.—“A-ras’pes.”

P. 101.—“Merm’na-dæ;” “Gyges,” ji’jes.

P. 102.—“Can-dau’les.”

P. 106.—“A-ly-at’tes.”

P. 107.—“Thras/y-bu’lus.”

P. 108.—“A-ri’on.”

P. 113.—“Pac-to’lus.”

P. 117.—“A’tis.”

P. 148.—“Prom’e-ne/a;” “Te-mar’e-te;” “Ni-can’der;” “As-trag/a-lus.”

P. 167.—“Tha’les.”

P. 168.—“The celebrated fifth proposition of the first book.” If two sides of a triangle are equal, then the angles opposite these sides are equal.

P. 170.—“Pteria,” te’ri-a.

P. 178.—“Tmolus,” mo/lus; “Hyrædes,” hy-re’des.

P. 193.—“Belus.” Son of Neptune. He was believed to be the ancestral hero and national divinity of several eastern nations. He was the same as the god Baal, of whom we read in the Scriptures, and, perhaps, the one known to the Phoenicians as Moloch. His temples were built on the tops of high hills, or still more frequently in solemn groves, and sometimes altars were erected to him on the roofs of houses. Incense was the most frequent offering presented to him, but we also read of sacrifices of bullocks, and even of children. Priests danced about

the altar during the sacrifices, and barbarously cut and mangled themselves if their gods did not specify answer their prayers.

P. 200.—“Pac’ty-as;” “Ta-ba’lus.”
 P. 202.—“A-ris-to-di’cus.”
 P. 228.—“A-bra-da’tes.”
 P. 256.—“Phe-rau’lus.”
 P. 267.—“A-glai’ta-das.”
 P. 272.—“Massagete,” mas-saj’e-te; “Tom’y-ris.”
 P. 273.—“Spar-ga-pe’zes.”

PART II.—ALEXANDER.

P. 19.—“Lannice,” lan-ni’ce.
 P. 20.—“Le’on-na’tus;” “Lysimachus;” ly-sim’a-kus.
 P. 30.—“Bu-ceph-a-li’a.”
 P. 31.—“Cheronaea,” ker’o-ne’a.
 P. 33.—“Attalus,” at’ta-lus.
 P. 37.—“One of his own daughters.” This daughter’s name was Cleopatra. She was full sister to Alexander, and consequently a niece of the king of Epirus, whom she married.
 P. 46.—“An-tip’a-ter;” “Par-me’ni-o.”
 P. 57.—“Haemus,” he’mus; “Rod’o-pe.”
 P. 86.—“A-by’dos.”
 P. 90.—“Enone,” e-no’ne.

P. 92.—“Cas-san’dra.” Apollo conferred upon her the gift of prophecy, and then she refused to keep the promise she made him in order to get this gift. Thereupon the god, in anger, ordained that no one should believe her prophecies. She predicted to the Trojans the ruin that threatened them, but no one believed her. She was looked upon as a mad woman. Upon the division of the booty after the destruction of Troy, she fell to Agamemnon, who carried her to Mycenæ. Here she was put to death by Clytemnestra, his wife.

P. 98.—“Pat’ro-chus.”
 P. 104.—“Prodromi,” pro’dro-mi.
 P. 129.—“Charidemus,” kar’i-de’mus.
 P. 133.—“Sisygambis,” sis’i-gam’bi.
 P. 141.—“Hephestion,” he-phe’sti-on.
 P. 182.—“Parathonium,” par-e-to’ni-um.
 P. 196.—“Guagamela,” gwa-ga-me’la.
 P. 208.—“Ecbatana,” ec-bat’a-na.
 P. 229.—“Polystratus,” po-lys’ta-tus.
 P. 234.—“Seraglio,” se-ral’yo. The palace of the Turkish Sultan, in which he, his court and his wives reside. Also a harem.
 P. 239.—“Dymnus,” dym’nu.
 P. 244.—“Po-lyd’u-mus.”
 P. 268.—“Aridaeus,” ar-i-de’us.
 P. 276.—“Basso relieveos,” bas’so re-liev’os.

NOTES ON REQUIRED READINGS IN “THE CHAUTAUQUAN.”

WHAT ENGLISH IS.

1. “Arretez-donc, Alphonse, arretez-donc.” A literal translation would be, Stop then, Alphonso, stop then.
 2. “Enfeoffed,” en-seft’. 1. To invest with a dignity; to convey as a fee. 2. To surrender; to give up.
 3. “Terra North Manorum.” Land of the Northmen.
 4. “Rubrics.” Those parts of any work which in ancient manuscripts were colored red, to distinguish them from other parts, especially the title pages.
 5. “Genevan Bible.” This famous Bible appeared in 1557, so called because the translation was made in Geneva by several English divines who had fled from the persecutions of the bloody Mary. It was long the favorite version of the English Puritans. It was accompanied by notes. Sometimes the name Breeches Bible is given to it, on account of the rendering of Gen. iii:7. “Then the eyes of them both were opened, and they knew that they were naked; and they sewed fig leaves together and made themselves *breeches*.” The authorized version, or *King James’s Bible*, has been in common use for over 250 years. In 1604 the king wrote a letter, intimating the appointment of fifty-four scholars for the preparation of the version, though only forty-seven undertook it. The work of translation and revision occupied three years. The superiority of their work soon proved itself, for in forty years all versions had quietly succumbed to it; it became the *English Bible*.

SUNDAY READINGS.

1. “Trajan’s Pillar.” A celebrated column at Rome, which was reared 114 A. D. by the Romans, in honor of Trajan, the emperor. It is considered one of the noblest structures of its kind ever erected. A very remarkable series of bas-reliefs, forming a spiral round the shaft, exhibits a continuous history of the military achievements of Trajan. The pedestal is covered with bas-reliefs of warlike instruments, shields and helmets. These are all in excellent preservation, and, independent of their beauty as works of art they are invaluable as records of ancient costume. A spiral staircase in the interior of the column leads to its summit. Its height is 132 feet. It still stands erect in all its ancient beauty.
 2. “Pompey’s Amphitheater.” The first permanent stone theater was erected in Rome by Pompey, B. C. 55. It contained seats for 40,000, and was adorned with a profusion of gold, marble and precious stones, such as the western world had never before witnessed. That such magnificence might not seem to be lavished upon a mere luxury, a temple was attached to it dedicated to Venus the Conqueror, so placed that the seats of the theater might serve as a flight of steps to the sacred

edifice. At the dedication of this famous theater Pompey treated the people to all sorts of games. There was a combat in which five hundred lions were slain; but above all, the battle of the elephants was a spectacle full of horror. Eighteen elephants were made to fight with trained bands of gladiators, and the cries of these half-reasoning beasts were such that they moved even that hardened populace to pity, and thus dampened the excitement of the day.

3. “Tuscan Urns.” The finest ware used for vases is that known as Samian, of the potteries of Tuscany. It is remarkable for its rich, red color. The vases are thin and delicate, and are looked upon as models of perfection in form, structure, and style of ornamentation.

4. “St. Cyprian, cy’pri-an. (200-258 A. D.) Bishop of Carthage. He was converted from paganism to the Christian religion; was banished from Carthage in the time of Valerian, during the persecutions, but was soon re-called and condemned to death. Cyprian was both a learned and eloquent divine, but he was even more conspicuous for his dignified, moderate and wise conduct. His knowledge of human nature enabled him to exercise a wide influence; and his correspondence, from which the best idea of his character is obtained, gives an interesting picture of the times in which he lived.

GLIMPSES OF ANCIENT GREEK LIFE.

1. “Chiton,” ki’ton; “Peplos,” pep’los. (See “Brief History of Greece,” p. 81.)
 2. “Himation,” hi-ma’tion. (See “Brief History of Greece,” p. 85; note.)
 3. “Archytas,” ar-ki’tas. (About 400 B. C.) He was one of the most illustrious men of antiquity. He was seven times elected general of his city (Tarentum), though it was customary for the office to be held only for one year. He was a philosopher, mathematician, and a writer. Only fragments of his works remain; they relate to metaphysics, ethics, logic and physics.
 4. “Italian Morra,” mor’ra. A simple game, played with the fingers and requiring expertness. If played by only two, standing by a table, one lays on it—say three fingers—and calls out some different number, say five. The other speaks and acts at the same instant, giving also a number; and simultaneously puts down his fingers. If the whole number of fingers on the table match or equal the number given by either, the other “makes his point” and tallies one. Repeating the trial, say ten times, he who makes the most points wins.
 5. “School.” See “Brief History of Greece,” p. 67; note.
 6. “Palæstra,” pa-les’tra. A school or place for athletic exercises.

7. "Phocylides," pho-cyl'i-des. (About 560 B. C.) An Ionian poet. His poetry has come down to us in fragments, only about eighteen in number, and is chiefly lyric and reflective.

8. "Learn by heart." During the most flourishing period of Athenian literature manuscripts were indifferently written, without marks of punctuation. They were scarce and costly, and could only be read by those who had literary training. Under these circumstances the Greeks could never become a reading people, and they became acquainted with the productions of their poets, only by hearing them recited in public by bards or rhapsodists, the latter being a body of professional reciters. It is said when Pisistratus wished to make a collection of the poems of Homer, he offered sums of money to as many of this class as would come to him and repeat, before a copyist, all of the parts that they had learned by heart.

9. "Barathrum." Literally a deep, or abyss, used as a name for the lower world.

10. "Ce-a'das."

GREEK MYTHOLOGY.

1. "Vat'i-can." A magnificent assemblage of buildings in Rome, including the Pope's palace—a library, museum, etc. It covers a space of 1,151 feet by 767 feet, has 200 staircases, and 4,422 rooms. The Belvedere, bel've-deer, signifying beautiful sight, is a small building on the top of the Vatican opening to the air on one side.

2. "Dis'cus." A quoit, or circular and usually perforated plate of metal or stone, used for pitching at a mark. Pitching quoits was a favorite amusement among the ancients, and forms the subject for frequent artistic representations. The most famous is Myron's statue called the "Discobolus," now in the British Museum.

3. "Hyacinth." In ancient times, it is said, there could be traced on the leaves of the hyacinth the Greek characters which express the word *alas*. Thus in his "Song of Silenus," just published, Cole speaks of

"The flowers the name still bearing which Apollo's favorite bore,
With the syllable of sorrow marked upon them evermore."

The origin of the hyacinth is also thus related: When Ajax (see notes on "Preparatory Greek") took his own life there sprung up from his blood a purple flower, bearing the Greek letters which were the initials of his name and expressive of a sigh.

4. "Clym'e-ne;" 5. "E-rid'a-nus;" 6. "He-li'a-des;" 7. "Am'phi-trite."

8. "Tri'dent." From *tris*, three, and *dens*, a tooth or prong. A three-pronged fork—Neptune's scepter.

9. "Lem'nos." A Turkish island in the Grecian Archipelago, sacred to Vulcan.

10. "Eu-ry'n'o-me," not Eurydice. A daughter of Oceanus.

11. "Nec'tar." The beverage of the gods. Homer describes it as resembling red wine, and says its continued use would cause immortality.

TEMPERANCE TEACHINGS OF SCIENCE.

1. "Re-gen'e-sis." A reproductive principle.

2. "Black death." The plague that raged in Europe in the fourteenth century, when it is said to have carried off twenty-five millions of people. It derived its name from the body turning black.

3. "Cau-ca'sian," not Cau-cá'sian, as so often pronounced.

4. "An-ac're-ons." Poets of Anacreon's class—Lyric poets—who write odes of a light character, and of which love, social pleasures and wine are the subjects.

5. "Ma-ras'mus." A wasting of the body without apparent disease; atrophy; phthisis.

6. "Pan-dem'ic." Incident to the whole population. From the Greek *pas* (all) and *demos* (people).

7. "Vis'i-goths." Western Goths; ancient inhabitants of the country along the Danube.

8. "Frit'i-gern." A leader of the Visigoths in their wars against the Romans in the latter part of the fourth century. He was a man of superior military and executive ability, and it is to his leadership that Gibbon attributes the power at that period of these people. He speaks of him as the "predecessor and master of the renowned Alaric."

9. "Láz'za-ro'ni." The poor in Italy who live by begging, and

have no permanent habitations. So called from the hospital of St Lazarus at Naples, which is their refuge.

10. "Mu-si'si." Strolling musicians of the organ grinder class.

11. "Proph-y-lac'tic." Preventive of disease.

12. "Aqua for'tis." Strong liquid; nitric acid.

13. "Scirrus," skir'rus. Indolent ulcers, often cancerous.

14. "Apologue," ap'o-log. A relation of felicitous events, intended to convey useful instruction; a moral fable.

15. "Les'ghi-an;" 16. "Daghistan," dä'ges-tän'; 17. "Cau'ca-sus;" 18. "Schnapps," shnäps. Holland gin.

19. "Mus'co-vites." Inhabitants of the northern borders of ancient Russia.

20. "Ossetes," os'se-teez. A race living on both sides of the Caucasus, near the Dariel Pass.

21. "Slé-bo'vets." Inferior brandy, distilled from peaches.

22. "Ca-che'tic." Pertaining to cachexy, a diseased condition of the body, resulting from cancer or syphilis.

23. "The'ine." A bitter, fusible, and volatile substance obtained in the form of white prisms, from coffee, tea, etc., the same as caffeine.

24. "Bouchardat," bou'shär'dä'. A French chemist, born in 1810. He has written much on scientific subjects.

25. "Ob-fus-ca-tion." The act of darkening or confusing things.

26. "Le'thal." Deadly; mortal; fatal.

KITCHEN SCIENCE AND ART.

1. "Hor-de'um Vul-ga're." Latin noun and adjective, signifying common barley.

2. "Ave'na Sa-ti'va." A species of bearded grass or wild oats; sow oats, literally.

3. "Lake habitations." These are dwellings constructed within the margins of lakes, at some distance from the shore. Researches on the continent have established the fact that in prehistoric times nearly all the shallow lakes in Switzerland and the adjoining countries were peopled by lake-dwelling communities. Their villages were constructed on platforms which were supported by piles. Many of the huts which were built on these substructures were roughly constructed of branches of trees; the floors were of clay and the roofs were thatched.

4. "Orizza salva," ö-ri'za. Sown rice.

5. "Polygonum esculentum," po-lij'on-um es-cu-len'tum. "Polygonum" means many knees, referring to the numerous joints in the stems of these plants. "Esculentum" means esculent; fit to eat.

HOME STUDIES IN CHEMISTRY.

1. "Grotto del Cane," grot'to del ca'na. Grotto of the dog. An excavation at the foot of a hill not far from Naples. The "American Cyclopædia" says of it: "It would seem from Pliny's reference to it as 'Charon's ditches,' that in his time the mephitic gas for which it is still remarkable was exhaled in quantity sufficient to prove fatal to human life. At the present time this forms but a shallow stratum on the floor, in which a candle is extinguished and dogs are stifled by way of experiment. The custom of exhibiting the effect of the carbonic acid gas upon dogs has given the distinctive name to the grotto."

2. "Killkenny Cats." "The story of two cats which fought so ferociously in a saw pit that when the battle was over only the tail of each was left. This is an allegorical representation of the municipalities of Killkenny and Irish-town, who contended so stoutly about boundaries and rights to the end of the seventeenth century that they mutually impoverished each other—ate each other up, leaving only a tail of each behind."

3. "Babcock's Fire Extinguisher." This instrument consists of an iron cylinder, in which are placed suitable quantities of the materials that, uniting, generate carbonic acid gas. There is an arrangement in the extinguisher by which the materials are brought in contact, and the gas when need is instantly generated; as provision is made for its egress a stream can be poured on the flame to extinguish it.

4. "Fire Grenade," gre-nade'. A hollow ball in which the gas is generated and which is thrown into the flames. The gas escaping extinguishes the fire.

5. "As-phyx'i-a." Apparent death resulting from suffocation, drowning, or inhalation of certain gases.

PEOPLE'S CHRISTMAS VESPER AND PRAISE SERVICE.

PREPARED FOR "THE CHAUTAUQUAN," FOR CHRISTMAS, DECEMBER 25, 1884.*

Praise God, from whom all blessings flow;
Praise him all creatures here below;
Praise him above, ye heavenly host;
Praise Father, Son and Holy Ghost.

HYMN 8.—*Old Hundred.*

From all that dwell below the skies,
Let the Creator's praise arise;
Let the Redeemer's name be sung,
Through every land, by every tongue.

Eternal are thy mercies, Lord;
Eternal truth attends thy word;
Thy praise shall sound from shore to shore,
Till suns shall rise and set no more.

Your lofty themes, ye mortals, bring;
In songs of praise divinely sing;
The great salvation loud proclaim,
And shout for joy the Savior's name.

PRAYER.

HYMN 332.—*Tune, Lenox.*
Let earth and heaven agree,
Angels and men be joined,
To celebrate with me
The Savior of mankind;
To adore the all-atoning Lamb,
And bless the sound of Jesus' name.

Jesus! transporting sound!
The joy of earth and heaven;
No other help is found,
No other name is given,
By which we can salvation have;
But Jesus came the world to save.

Jesus! harmonious name!
It charms the hosts above;
They evermore proclaim
And wonder at his love;
'Tis all their happiness to gaze—
'Tis heaven to see our Jesus' face.

PROMISE OF CHRIST'S COMING.

Pastor. O Lord, how manifold are thy works; in wisdom hast thou made them all.

Congregation.—In Mount Zion, and in Jerusalem shall be deliverance, as the Lord hath said.

Pas.—Abraham shall surely become a great and mighty nation, and all the nations of the earth shall be blessed in him.

Con.—And in the seed shall all the nations of the earth be blessed; because thou hast obeyed my voice.

Pas.—When the fullness of the time was come, God sent forth his Son, made of a woman, made under the law, to redeem them that were under the law.

Con.—And the Word was made flesh, and dwelt among us, and we beheld his glory, the glory as of the only begotten of the Father, full of grace and truth.

Pas.—He shall be great, and shall be called the Son of the Highest.

Con.—The Jews sought the more to kill him, because he said that God was his Father, making himself equal with God.

Pas.—Jesus said, Dost thou believe on the Son of God? It is he that talketh with thee.

Con.—Say ye, Thou blasphemest, because I said, I am the Son of God?

Con.—The Jews said, By our law he ought to die, because he made himself the Son of God.

Pas.—I ascend to my Father and your Father; to my God and your God.

Con.—These are written, that ye might believe that Jesus is the Christ, the Son of God.

ANTHEM BY THE CHOIR.

THE ANGELS TELL OF HIS COMING.

Pas.—And there were in the same country shepherds abiding in the field, keeping watch over their flock by night.

Con.—And, lo, the angel of the Lord came upon them, and the glory of the Lord shone round about them; and they were sore afraid.

Pas.—And the angel said unto them, Fear not; for, behold, I bring you tidings of great joy, which shall be to all people.

Con.—For unto you is born this day in the city of David a Savior, which is Christ the Lord.

Pas.—And suddenly there was with the angel a multitude of the heavenly host praising God, and saying,

Con.—Glory to God in the highest, and on earth peace, good will toward men.

Pas.—And it came to pass, as the angels were gone away from them into heaven, the shepherds said one to another, Let us now go even into Bethlehem, and see this thing which is come to pass, which the Lord hath made known unto us.

Con.—And when they had seen it, they made known abroad the saying which was told them concerning this child.

Pas.—And the shepherds returned, glorifying and praising God for all the things that they had heard and seen, as it was told unto them.

TUNE—*St. Martin.*

How great the wisdom, power and grace,
Which in redemption shine;
The heavenly host with joy confess
The work is all divine.

Before his feet they cast their crowns,
Those crowns which Jesus gave,
And with ten thousand thousand tongues,
Proclaim his power to save.

With them let us our voices raise,
And still the song renew;
Salvation well deserves the praise
Of men and angels too.

THE SAVIOR HAS COME.

Pas.—And the Word was made flesh, and dwelt among us, and we beheld his glory, the glory as of the only begotten of the Father, full of grace and truth. Thou art my Son, this day have I begotten thee.

Con.—I will make him my first-born, higher than the kings of the earth.

Pas.—Unto us a Son is given, and the government shall be upon his shoulder.

Con.—A voice from heaven, saying, This is my beloved Son, in whom I am well pleased.

Pas.—The devils cried out, saying, What have we to do with thee, Jesus, thou Son of God.

Con.—He shall be great, and shall be called the Son of the Highest.

Pas.—The Jews sought the more to kill him, because he said that God was his Father, making himself equal with God.

Con.—Jesus said, Dost thou believe on the Son of God? It is he that talketh with thee.

Pas.—Say ye, Thou blasphemest, because I said, I am the Son of God?

Con.—The Jews said, By our law he ought to die, because he made himself the Son of God.

Pas.—I ascend to my Father and your Father; to my God and your God.

Con.—These are written, that ye might believe that Jesus is the Christ, the Son of God.

TUNE—*Antioch.*

Joy to the world! the Lord is come;
Let earth receive her King;
And heaven and nature sing.
Let every heart prepare him room,
Joy to the world! the Savior reigns;
Let men their songs employ;
While fields and floods, rocks, hills and plains
Repeat the sounding joy.

He rules the world with truth and grace,
And makes the nations prove
The glories of his righteousness,
And wonders of his love.

CHRIST BRINGS PEACE AND BLESSING.

Pas.—Behold my servant, whom I uphold; mine elect, in whom my soul delighteth; I have put my spirit upon him; he shall bring forth judgment to the Gentiles.

Con.—He shall not cry, nor lift up, nor cause his voice to be heard in the street.

Pas.—A bruised reed shall he not break, and the smoking flax shall he not quench; he shall bring forth judgment unto truth.

Con.—He shall not fail nor be discouraged till he have set judgment in the earth; and the isles shall wait for his law.

Pas.—Sing unto the Lord a new song, and his praise from the end of the earth; ye that go down to the sea, and all that is therein; the isles, and the inhabitants thereof.

Con.—Let the wilderness and the cities thereof lift up their voice, the villages that Kedar doth inhabit; let the inhabitants of the rock sing; let them shout from the top of the mountains.

Pas.—Let them give glory unto the Lord, and declare his praise in the islands.

Con.—And I will bring the blind by a way that they knew not; I will lead them in paths that they have not known; I will make darkness light before them, and crooked things straight; these things will I do unto them, and not forsake them.

HYMN 66.—*Tune, Duke Street.*

Come, let us tune our loftiest song,
And raise to Christ our joyful strain;
Worship and thanks to him belong,
Who reigns, and shall forever reign.

His sovereign power our bodies made;
Our souls are his immortal breath;
And when his creatures sinned, he bled,
To save us from eternal death.

Burn every breast with Jesus' love;
Bound every heart with rapturous joy;
And saints on earth, with saints above,
Your voices in his praise employ.

SERMON BY THE PASTOR.

PRAYER.

GLORIA PATRI.

Glory be to the Father,
And to the Son, and to the Holy Ghost,
As it was in the beginning, is now, and ever
shall be,
World without end. Amen.

BENEDICTION.

* This Christmas Service may be obtained of us at the following rates, postage paid by us: 100 copies, \$1.00; 200 copies, \$1.50; 300 copies, \$2.00; 400 copies, \$2.50; 500 copies, \$3.00. Address, THE CHAUTAUQUAN, Meadville, Pa.

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TALK ABOUT BOOKS.

Four neatly printed, well bound, illustrated books, edited for boys by Sidney Lanier, appear as Christmas books, and happy boys indeed will all those be who receive any or all of them as presents. The very mention of good King Arthur, although little more than his name may be known, seems to act as a charm upon boyish hearts and fascinate them with its spell. And now that they can read all about him,* and how he organized his famous Knights of the Round-Table, about the search for the holy cup, Sir Tristram, and all the rest, they will find the old charm working with increased power, and will be fairly surprised at the endless fascination of the story.

Froissart five hundred years ago wrote a history of the wars of his times, in which occurred the battle of Crecy, where the blind old king of Bohemia fell, the battle of Poitiers, and the Siege of Calais; an account of an expedition against the Saracens, and much about the old-time knights. And now this old book, which has lived, and grown in esteem for so long, has been condensed and rewritten† especially for the boys. If they read aright, the true spirit of knighthood must take possession of them as they read these knightly tales.

"The Boy's Percy"‡ is a collection of old ballads of war, adventure, and love. We read in rhyme of Robin Hood and his amazing marksmanship. There is the "Ballad of Chevy Cace," and the "Friars Gray," "The legend of Sir Guy," "St. George and the Dragon," and many others. And as we read these all seem to emerge and stand out "like rich tapestry work, wrought large as life" upon the hangings of our living room.

And then comes a collection of twelve Welsh legends|| of King Arthur and his knights, giving to the readers of our times the quaint old fancies of the people of Wales in years gone by. At the close of his introduction to this book Mr. Lanier says: "I can wish my young readers few pleasures of finer quality than that surprised sense of a whole new world of possession which came to me in my first reading of these old tales."

There is a new edition of Hawthorne's "Wonder Book."§ Ever since the author put into effect his idea that classical myths were capable of being rendered into very capital reading for the children, this book has been a marvel to childhood. This new edition has the additional charm of being illustrated by the able hand of Mr. F. S. Church.

"The Story of Vitean,"¶ from Frank Stockton's lively pen, proved a great favorite in *St. Nicholas*, some time ago, and now that it has been gathered into a book will be a real addition to anybody's library. It is a story of the thirteenth century, of knights of the *coteaux*, of the Inquisition, and of marvelous adventures. The boy heroes and their opposites make a story of wonderful interest.

"The Wagoner of the Alleghanies"** is another favorite poem which appears in a new Christmas dress. The cover is not pretty, but the printing and paper are, and the illustrations are engravings of great merit.

A little time spent with Messrs. Geo. H. Boughton and Edwin A. Abbey's delightful "Rambles"†† quite dispels any prejudice which we

may have against Holland as an uninteresting country. These gentlemen have proven in their book that she possesses picturesque people. These "sketchable" fisher-folk, these stout lasses and round Dutchmen have furnished subjects for a collection of charming pictures which, with the interesting text furnished by Mr. Boughton, make an unusually fine volume.

"Uncle Lawrence" has again furnished his young friends with a capital story* which has the rare merit of teaching them a great many things without boring them at all. The queer ideas and experiments of Miss Mollie, the little heroine, are very entertaining. The book is largely an adaptation from the French.

The most complete edition of Lord Tennyson's works† yet issued is the collection by the Harpers. It has the merit of being complete and exact; beside, the book is enriched by good illustrations, and has as an introduction a very excellent sketch of Tennyson, reprinted from *Harpers Magazine* for December 1883.

The beautiful "Artists' Edition" of "Gray's Elegy," which Messrs. Lippincott & Co. gave us last holiday time is out this year in a smaller but equally choice form.‡ The engravings in these books are exceedingly fine.

A really funny book is a rarity, but it is a rarity found in "Stuff and Nonsense."|| Mr. Frost has surpassed himself in the grotesque pictures he has put to his nonsensical rhymes. Particularly laughable are his picture stories, "A Fatal Mistake," and "The Balloonists."

Among the picture-and-song books for young folks, "Stories in Rhyme for Holiday Time"§ is particularly desirable. The rhymes are quite good, and the pictures better than in the average book of this kind. Among the rhymes, "Bob's Bicycle Ride" will be found most entertaining, and "Eglantine, or The Magical Gloves" is a beautiful fairy story.

Shakspere's Seven Ages of Man furnishes the text for an elegant holiday volume|| of full page photogravures. These illustrations are from well known paintings, notable among them being Church's "Infant" and Harper's "School Boy." It is a very choice book.

Mr. Shepard in simplifying Josephus has met a want of the times. These old masterpieces of literature which it used to be thought only mature minds could comprehend, rewritten into simpler language for young readers can not fail of bringing about grand results. The "Young Folks' Josephus"** is written in language that any scholar in the fourth reader class can readily understand and enjoy.

The story of two fun-loving, manly boys who lived in Compton,†† is full of rich humor, and many a hearty laugh is enjoyed over its pages. The scrapes they got into, and some of their original methods of trying to get out again are set forth in such a vivid manner that one feels almost as if he had been through them himself. And the fact that one of these boys was white and the other black only heightens the interest of the book.

"Country Cousins,"‡‡ although it does not belong to the older people,

* Young Folks' Ideas. A story by Uncle Lawrence. Philadelphia: J. B. Lippincott & Co. 1883.

† The Complete Poetical works of Alfred, Lord Tennyson, Poet Laureate. New York: Harper & Brothers, Publishers. 1884.

‡ An Elegy written in a Country Church-yard. By Thomas Gray. Philadelphia: J. B. Lippincott & Co. 1885.

|| Stuff and Nonsense. By A. B. Frost. New York: Charles Scribner's Sons. 1884. Price, \$1.50.

§ Stories in Rhyme for Holiday Time. By Edward Jewitt Wheeler. Illustrated by Walter Saterlee. New York: Funk & Wagnalls. 1884.

¶ The Seven Ages of Man, from Shakspere's "As you like it." The Artist's Edition. Philadelphia: J. B. Lippincott & Co. 1885. Price, \$3.00. Smaller Edition, \$1.50.

** Our Young Folks' Josephus. Simplified by William Shepard. Illustrated. Philadelphia: J. B. Lippincott & Co. 1884. Price, \$3.50.

†† Two Compton Boys. By Augustus Hoppin. With ninety-three illustrations. Boston: Houghton, Mifflin & Co. 1885. Price, \$1.50.

‡‡ Country Cousins. By Ernest Ingersoll. New York: Harper & Brothers. Franklin Square. 1884.

* The Boy's King Arthur. By Sidney Lanier. New York: Charles Scribner's Sons. 1884. Price, \$2.00.

† The Boy's Froissart. By Sidney Lanier. New York: Charles Scribner's Sons. 1884. Price, \$2.00.

‡ The Boy's Percy. By Sidney Lanier. New York: Charles Scribner's Sons. 1884. Price, \$2.00.

|| Knightly Legends of Wales. By Sidney Lanier. New York: Charles Scribner's Sons. 1884. Price, \$2.00.

§ A Wonder Book for Girls and Boys. By Nathaniel Hawthorne. With illustrations by F. S. Church. Boston: Houghton, Mifflin & Co. 1885. Price, \$2.50.

¶ The Story of Vitean. By Frank R. Stockton. New York: Charles Scribner's Sons. 1884. Price, \$1.50.

** The Wagoner of the Alleghanies. A Poem of the Days of Seventy-Six. By T. Buchanan Read. Illustrated from drawings by Hovenden, Fenn, Gaul and Low. Philadelphia: J. B. Lippincott & Co. 1885. Price, \$1.50.

†† Sketching Rambles in Holland. By Geo. H. Boughton, A.R.A. With illustrations by the author and Edwin A. Abbey. New York: Harper & Brothers. 1885.

SPECIAL NOTES.

seems to be especially interesting to them. The New York *Tribune* says, in answer to one of its correspondents: "Mrs. —— will find 'Country Cousins' pleasant reading in natural history." It might have said, too: If any boy or girl wants to know about birds, or toads, or elks, or tree-chopping, or all kinds of shells, and ever so many other things, they can all be found illustrated and fully described in "Country Cousins."

The last of the entertaining Bodley books* opens by presenting to the reader a group of six persons sitting on the deck of a steamer which was just casting off from Hull for a voyage to Scandinavia. They go as far north as any one can go, and see the sun at midnight; they visit the fiords, and the principal mountains, and all leading places of interest; they seek out the home of Hans Christian Andersen and Thorwaldsen; and after spending several months in this way return to their home in the United States.

"The Voyage of the Vivian"† is an account of an expedition to the North Pole. It presents an array of facts upon a groundwork of fiction. The facts have been taken from accounts made by explorers from the earliest time down to the present. As these explorers pass into those far-away frozen regions they recall and relate the experiences of the real characters who had been there before them. The author indulges in a little that is purely imaginary. He allows his crew to reach the open Polar Sea, "and explore islands and waters which are as yet concealed from mortal vision." The book is designed for young readers, but those of mature minds will find it very entertaining. It is finely illustrated, many whole page pictures being given.

"My Aunt Jeanette"‡ is a very readable book; albeit some passages do bring a certain moisture to the eyes and a mist over the page that, for a time, interrupts the reading. It is the plainest kind of a narrative, without special literary merit, and the farthest remove from anything

* The Viking Bodleys. By Horace E. Scudder. With illustrations. Boston: Houghton, Mifflin & Co. 1885. Price, \$1.50.

† The Voyage of the Vivian. By Thomas W. Knox. New York: Harper & Brothers. Franklin Square. 1885.

‡ My Aunt Jeanette. By Mrs. S. M. Kimball. New York: Phillips & Hunt; Cincinnati: Cranston & Stowe. 1884. Price, \$1.00.

sensational. The reader is without ceremony introduced to a rural New England community, with the characteristics of New England of eighty years ago. He meets the settled pastor, and members of his flock, and finds them mostly worthy people, and decidedly religious. The principal character is so well drawn that, having laid the book aside, the image has the distinctness of a real presence.

"Wall Street in History"** is a book well written and beautifully illustrated. It gives a concise, but clear, reliable history of that famous locality, and some events that have given it a world-wide celebrity. The maps, sketches, and numerous portraits add interest to the history, and give the varying aspects of the place from its primitive to its present condition. The site, at first a picturesque tangle of underbrush and wild vines, was partially reclaimed from its wilderness state by constructing there a wooden wall, which, for half a century, fenced in the city, and subsequently gave its name to a street where business is now transacted on a larger scale, and with more tremendous results than at any other place on the continent.

A collection of some thirty of Dr. O. W. Holmes's poems† has just been made by Houghton, Mifflin & Co., which for illustrations, typography and binding is a marvel of beauty. The frontispiece, a portrait of Dr. Holmes, is a real treasure. It is an etching by S. A. Schou, and far surpasses anything of the kind we have ever seen of the genial doctor.

The Adventures of Robin Hood could not be better told than they have been by Howard Pyle.‡ From the time he starts Merry Robin to the shooting match at Nottingham Town up to the sad hour of his death there is not a dull page in the book. The publishers have chosen a delightful make-up, with Old English style of illustrations, with numerous head and tail-pieces, and a sprinkling of red ink and queer devices.

* Wall Street in History. By Martha J. Lamb. New York: Funk & Wagnalls. 1883.

† Illustrated Poems of Oliver Wendell Holmes. Boston: Houghton, Mifflin & Co. 1885.

‡ The Merry Adventures of Robin Hood of Great Renown in Nottinghamshire. Written and illustrated by Howard Pyle. New York: Printed by Charles Scribner's Sons. 1884.

SPECIAL NOTES.

We hope that the plan adopted in this issue, of marking the words in the Required Readings in THE CHAUTAUQUAN which are annotated, with a figure, will meet with the approval of our readers. Many requests have been received asking for some plan of marking the words on which notes had been made.

The course of study as it appears in the Popular Educational circular in this issue of THE CHAUTAUQUAN is complete and correct. It was found necessary to revise the course somewhat after its first appearance in the circular, hence the difference between the course as it first appeared and as it now is given.

The Vesper Service which appears in this issue of THE CHAUTAUQUAN has been prepared especially for our readers. It can be procured at our office in quantities, if desired. See advertisement.

SUBSTITUTIONS.

It is earnestly desired that all members of the C. L. S. C. will read the appointed and required books.

Substitutes can be accepted only where pupils are too poor to purchase new works.

It is not allowable for local circles, committees or chairmen to choose other than the appointed readings.

Any other policy would be disastrous to the aims of the C. L. S. C.

J. H. VINCENT.

New Haven, Nov. 6, 1884.

ENGLISH HISTORY AND LITERATURE—BLUE SEAL—SHIELD.
W. D. MacClintock, A. M., Secretary of Department.

I. HISTORY:

A. Required:

Green's "Short History of the English People" . . . \$1.20
Creighton's "Age of Elizabeth" (Epoch Series) . . . \$1.00

B. Recommended:*

Freeman's "Growth of the English Constitution" . . . \$1.75
McCarthy's "Epoch of Reform" (Epoch Series) . . . \$1.00

II. LITERATURE:

A. Required:

Brooke's "English Literature" (Literature Primers) \$.45
Ward's "English Poets,"† four volumes \$4.00

"English Classics" Series (Clarke & Maynard), of
Addison's "Sir Roger De Coverley;"
Bacon's "Essays;"
Macaulay's "Bunyan;"

Carlyle's "Hero as a Prophet;" each \$.10
Shakspeare's "King Lear," and "Merchant of Venice" (Rolle edition), in paper 40 cts., cloth 60 cts.

B. Recommended:

Whipple's "Literature of the Age of Elizabeth" . . . \$1.50
Minto's "Manual of English Prose Literature" . . . \$2.50

* The Seal will be given for the "Required Reading," but a desire to render the required course as cheap as possible has made it incomplete. It is therefore hoped that all who can buy the books will read the "Recommended" books.

† Although this book seems expensive, yet, seeing that there are four volumes, that it is a standard work, and that it covers the whole period of our literature, it will be found to be cheap.